JULY

SUPER SCIENCE STORIES

25¢

THE BIG BOOK OF SCIENCE FICTION

JOHN D. MacDONALD'S
DYNAMIC NOVEL OF TOMORROW
HALF-PAST ETERNITY

VENGEANCE, UNLIMITED
by FREDRIC BROWN

PETER REED
ROBERT MOORE WILLIAMS
MANY OTHERS

SPECIAL OFFER TO READERS OF THIS MAGAZINE!

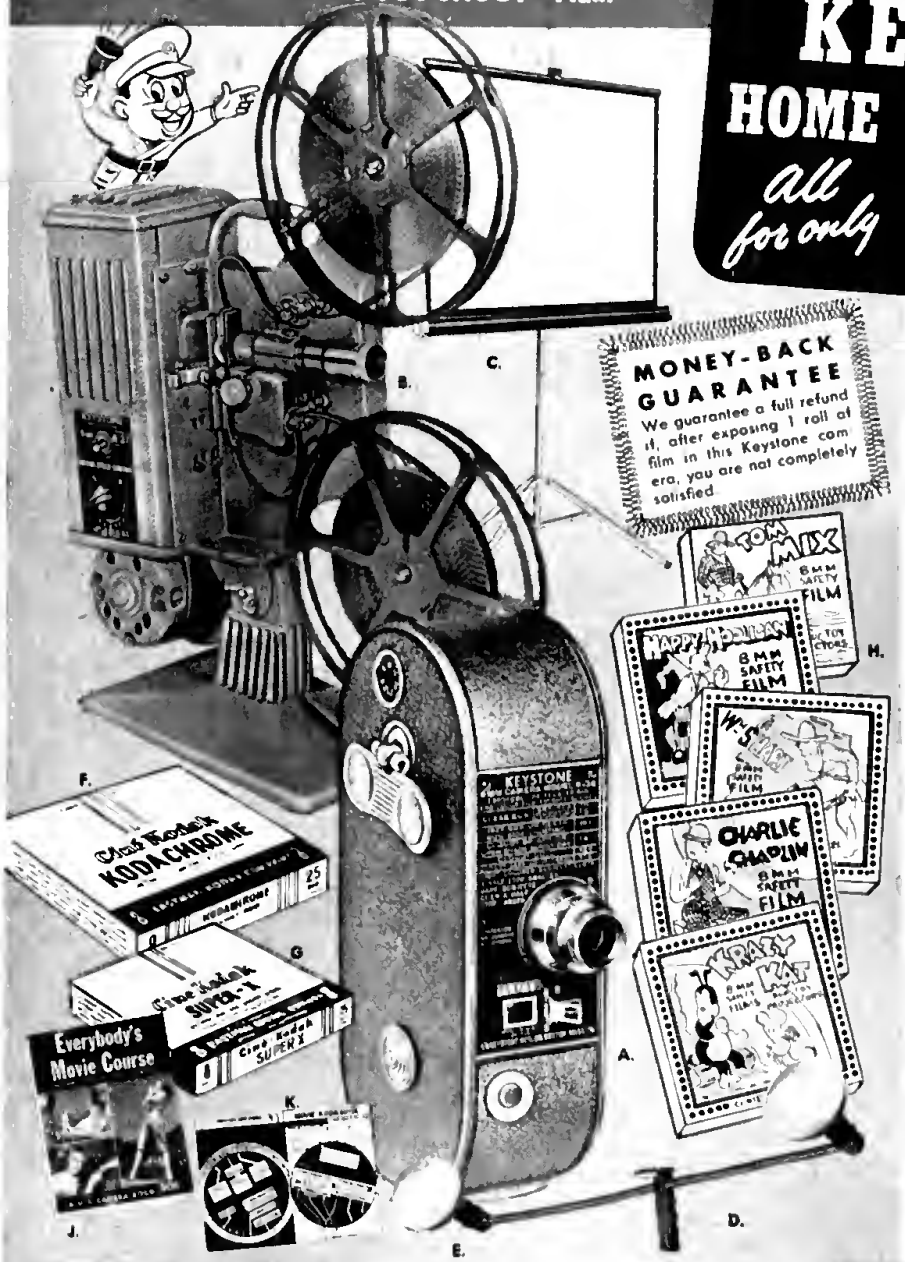
BUY NOW—PAY LATER!

The General makes buying extra easy with the convenient "PAY-AS-YOU-SHOOT" Plan!

Complete 13-piece NATIONALLY FAMOUS

KEYSTONE HOME MOVIE OUTFIT

all for only **$129.50** **$12 Down** **$2.50 a Week**



You get all this for $129.50

A 8mm KEYSTONE MOVIE CAMERA Bright new 1/1.9 lens with three-coated lens. Achromatic 3-range turret head. Deep range telephoto viewfinder shows subjects as close as normal and far. Wrist strap. **$49.95**

$5.50 Down — $5 per Month

B 8mm KEYSTONE MOVIE PROJECTOR Shows movies at their bright clear best. Powerful 300 watt lamp and color corrected achromatic lens. Film clutch controller automatic rewind. Forced draft cooling. Variable speed control. AC/DC. **$54.50**

$5 Down — $5 per Month

C RADIANT SCREEN 30 x 40" The famous Radiant screen with sensational Million Mirror fabric! Brings out all the beauty of your films. Roll type screen. Folding tripod base. Adjustable height. Compact portable. **$5.95**

D MOVIE LITE (FOTO KITE) Gives you perfect "sun bright" lighting indoors for movie making any time of day the year around. Light turns with camera. Flexible adjustable arms. **$5.95**

E 2 RFL-2 REFLECTOR BULBS ($1.05 ea.) Perfect for use with Movie Lite. Built-in reflectors throw maximum light forward on subject. **$2.10**

F 1 ROLL 8mm EASTMAN KODACHROME FILM You'll get a thrill out of seeing the movies you take in beautiful, natural color. **$3.75**

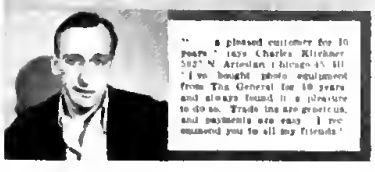
G 1 ROLL 8mm KODAK BLACK & WHITE FILM High speed film gives perfect results outdoors and indoors too. Brings out every detail of scene sharply with fine contrast. **$2.85**

H 3 50 FT. ROLLS HOLLYWOOD FILMS (Reg. $1.45 ea.) Choose your own subjects. Many exciting reels in ordinary comedy, sports, adventure, cartoons, etc. **$3.95**

J EVERYBODY'S MOVIE COURSE (Reg. 50¢) Gives you lots of movie making tips. Tells when, where and how to shoot movies you'll be proud to show. **25¢**

K MOVIE KODAGUIDE Instantly tells you the correct lens opening for all films and lighting conditions. Insures better results every time. **25¢**

Your whole family shares in the fun when you get a complete Keystone home movie outfit! Your movies of children, grown-ups and friends will grow more and more precious to you as years go by. Thanks to The General's convenient deferred payment plan, this "nothing else to buy" Keystone outfit is the *easiest, smartest* thing you can buy for year 'round enjoyment. And what a "sweetheart" of a gift it makes, too! Write, phone, or better still—come in today!



"... a pleased customer for 10 years," says Charles Kirchner, 5825 N. Artesian, Chicago 45, Ill. "I've bought photo equipment from The General for 10 years and always found it a pleasure to do so. Trade-ins are generous, and payments are easy. I recommend you to all my friends."

It's easy to buy on The General's "PAY-AS-YOU-SHOOT" PLAN

Your credit is good with The General! Mail coupon with down payment and note telling about yourself, occupation and two references.

The General Camera Co.

2304 Devon Ave., Chicago 45, Ill.

CHICAGO VISITORS: See our huge camera store in THE MERCHANDISE MART PLAZA, Chicago

IF YOU CANNOT COME IN
phone HOllycourt 5-3600 or MAIL THIS COUPON

THE GENERAL CAMERA CO., 2304 Devon Ave., Chicago 45

- ☐ Complete 13 pc. home movie outfit at $129.50. $12 Down — $10 per Month
- ☐ Keystone 8mm Projector at $54.50. $5.50 Down — $5 per Month
- ☐ Keystone 8mm Camera at $49.95. $5 Down — $5 per Month
- ☐ Radiant 30 x40" screen at $5.95
- ☐ Movie Lite at $5.95

Name _____

Address _____

City _____ Zone _____

My Phone _____ Or Nearby Phone _____

If you have or have had an account with us give No. _____

5 EASY WAYS TO BUY (Check One)

- ☐ Enclose Check or Money Order
- ☐ C.O.D. (C.O.D. deposit must accompany order)
- ☐ Credit Account (Name as shown at left)
- ☐ Add to My Open Account
- ☐ Open My Account

JERRY RECAPTURED THE LION AND THEN...

ON AN OVERNIGHT HOP TO THE NEXT TOWN, YOUNG JERRY HUNTER'S SMALL TRAVELING CIRCUS SUDDENLY LOSES ONE OF ITS MAJOR ATTRACTIONS...

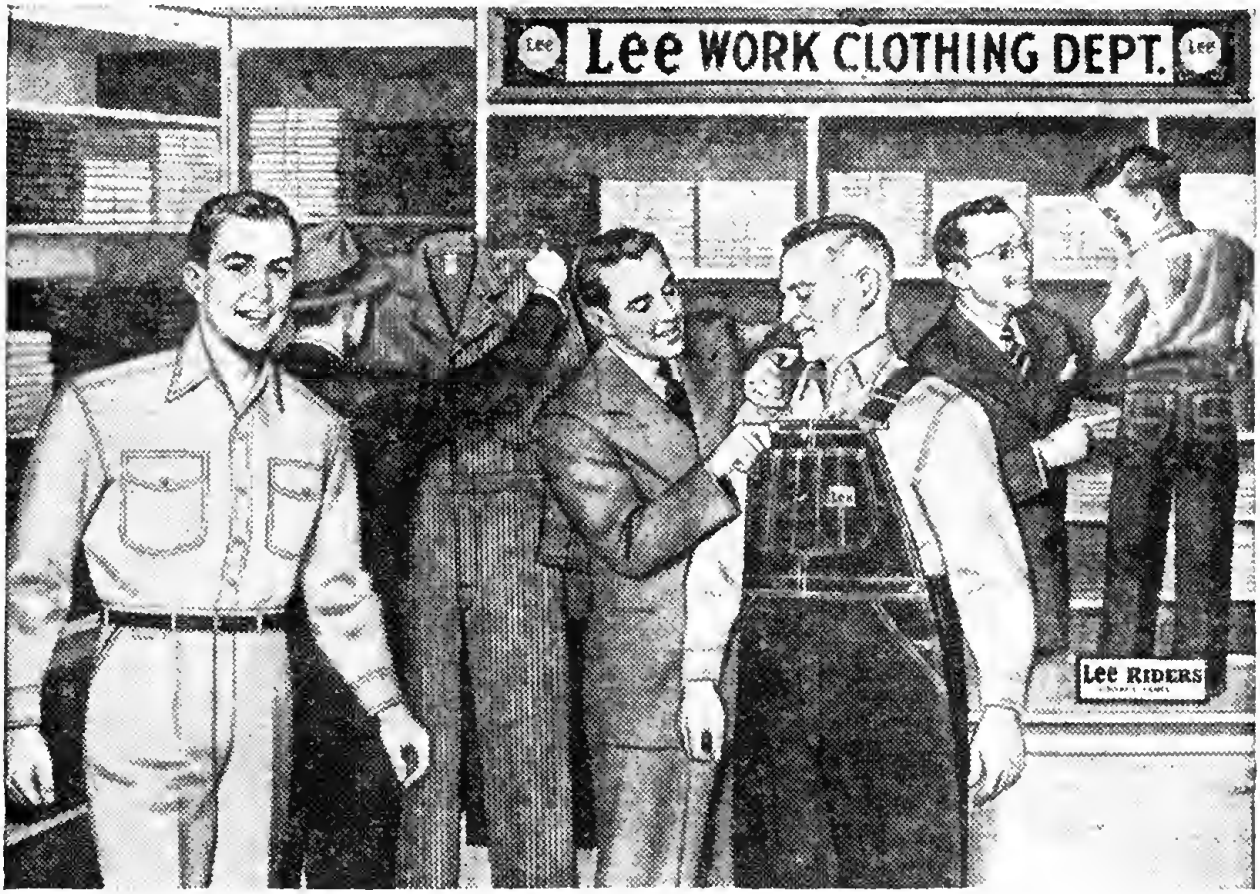
NEXT MORNING

MARY PETERS HAD HEARD THAT ANYTHING CAN HAPPEN ON OPENING DAY OF BASS SEASON. BUT THIS IS TOO MUCH!

YOU GET EASY, REFRESHING SHAVES IN JIGTIME WITH **THIN GILLETTES.** FAR KEENER THAN ORDINARY LOW-PRICED BLADES, **THIN GILLETTES** LAST LONGER, SO YOU SAVE MONEY. WHAT'S MORE, THEY FIT YOUR **GILLETTE RAZOR** TO A "T"... PROTECT YOU FROM NICKS AND IRRITATION. ASK FOR **THIN GILLETTES** IN THE 10-BLADE PACK WITH USED BLADE COMPARTMENT

NEW TEN-BLADE PACKAGE HAS COMPARTMENT FOR USED BLADES

You can buy Lee work clothes in more retail stores coast-to-coast THAN ANY OTHER BRAND



More Men wear work clothes bearing a Lee label THAN ANY OTHER BRAND

The LEE Guarantee: Every Lee garment is guaranteed to look better, fit better and wear longer than any you have ever worn, or you can have a new pair free or your money back.

COPYRIGHT 1950
THE H. D. LEE CO., INC.

SANFORIZED FOR PERMANENT FIT

Buy Lee work clothes at leading stores coast-to-coast

THE H. D. LEE COMPANY, INC.

Kansas City, Mo. • San Francisco, Calif.
Minneapolis, Minn. • South Bend, Ind. • Trenton, N. J.

WORLD'S LARGEST MANUFACTURERS OF UNION MADE WORK CLOTHES

SUPER SCIENCE STORIES

25¢

THE BIG BOOK OF SCIENCE FICTION

VOL. 7 JULY, 1950 NO. 1

A POWERFUL NOVEL

HALF-PAST ETERNITY.....*John D. MacDonald* **12**

Slowly he built an eternal empire with stolen seconds from other men's lives . . . till his own span lay between dawn and the endless night that he would never see!

THREE NOVELETTES OF THE FUTURE

KING OF THE STARS.....*William L. Bade* **48**

The Immortal Titan knew the doom the stars had ordained for it and all its hopes rested with the quarreling, ephemeral scourge called Man!

THE ANCIENT ONES.....*Harold S. Sykes* **92**

Inheritors of an Earth they could not possess, they strugged onward toward a feeble glimmering of life, while Death Incarnate stalked in their track!

TO THE END OF TIME.....*Robert Moore Williams* **108**

The quest of the madness melody took Thorndyke to the end of time!

SHORT STORIES

LAST RETURN.....*Roger Dee* **62**

THEY were waiting, just beyond the chill border of space—and Kane's doomed countrymen would not, could not understand the dread message he brought!

VENGEANCE, UNLIMITED.....*Fredric Brown* **66**

There was an excuse for the wanton blasting of Venus into a molten hell—one that all-conquering Earth would never forget—or remember without shame!

ESCAPE TO FEAR.....*Peter Reed* **72**

Relentless as death itself, the alien destroyer followed them through superspace—toward a grim rendezvous to which all roads led!

THE METAL SMILE.....*Alfred Coppel* **78**

The final chapter in Adam's bloody history!

A BIT OF FOREVER.....*Walt Sheldon* **84**

At seven that morning, five minutes dropped out of the universe—and Will Henning began the trail that led to—a bit of forever!

DEPARTMENTS AND FEATURES

FANDOM'S CORNER.....*Conducted by James V. Taurasi* **6**

THE SCIENCE FICTIONEER.....*Conducted by Frederik Pohl* **69**

MISSIVES AND MISSILES.....*The Readers* **123**

Cover by Lawrence

Illustrations by Callé, Lawrence, Paul and Van Dongen

Any resemblance between any character appearing in fictional matter, and any person, living or dead, is entirely coincidental and unintentional.

Published bi-monthly by Fictioneers, Inc., a subsidiary of Popular Publications, Inc., at 1125 E. Valle Ave., Kokomo, Indiana. Editorial and Executive Offices, 205 East 42nd Street, New York 17, N. Y. Henry Steeger, President and Secretary. Harold S. Goldsmith, Vice-President and Treasurer. Entered as second-class matter at the Post Office at Kokomo, Indiana.

Copyright, 1950, by Fictioneers, Inc. This issue is published simultaneously in the Dominion of Canada. Copyright under International Copyright Convention and Pan-American Copyright Conventions. All rights reserved, including the right of reproduction, in whole or in part, in any form.

Single copy, 25c. Annual subscription for U. S. A., its possessions and Canada, $1.50; other countries, 38c additional. All correspondence relating to this publication should be addressed to 1125 E. Valle Ave., Kokomo, Indiana, or 205 East 42nd Street, New York 17, N. Y. When submitting manuscripts, enclose stamped, self-addressed envelope for their return if found unavailable. The publishers will exercise care in the handling of unsolicited manuscripts, but assume no responsibility for their return. Printed in U. S. A.

FANDOM'S CORNER

Conducted by James V. Taurasi

FANDOM was saddened to learn on March 19 that Edgar Rice Burroughs had gone to the great beyond. He was 74 years old, and left behind him some fifteen unfinished adventures of his famous fantasy characters. He started to write at the age of 35; since then his books have been translated into 56 languages and have sold 35,000,000 copies.

The Eastern Science Fiction Association, meeting monthly in Newark, N. J., had its biggest turnout ever when Hugo Gernsback, the father of science-fiction, spoke at the March meeting. Ninety-five fans, authors, editors and fans showed up. This was the first time Mr. Gernsback had attended a stf. fan club. Sam Moskowitz is the headman here and he can give you information on future meetings. Write to him at 127 Shephard Avenue, Newark 8, N. J.

A new fan organization was begun early this year in Spokane, Wash. A letter from the secretary, Richard F. Myers, reads: "We of the Spokane Science-Fantasy Club would like to announce in your columns the birth of our organization in the city of Spokane. We are looking for any and all fantasy and science-fiction addicts in the "Inland Empire" to become members of our organization. Persons in the Spokane area may contact A. Bernice Clark, phone MA-3685 or write to me, Richard Myers, 24 Rockwood Blvd., Spokane 10, Wash." We wish you luck, Bob. Keep us posted on how you make out.

British fans received another break when *Super Science's* sister magazine, *Fantastic Novels,* published its first British edition. Unlike most British reprints, this one was reprinted complete, including the readers' department. The first British edition, undated, corresponds to the November 1949 American issue. This is the second of Popular's four fantasy magazines to see British publication.

Arthur Jean Cox of the Los Angeles Science Fantasy Society reports that Vernell Coriell, world's foremost authority on Edgar Rice Burroughs and publisher of the fan mag, *Burroughs Bulletin,* spoke before the LASFS on March 2, and showed them the original Tarzan movie, "Tarzan Of The Apes", starring Elmo Lincoln. Next year, Mr. Cox tells us, Mr. Coriell plans to sponsor a giant convention for Burroughs fans, somewhere in the midwest. He plans to show many of the Tarzan films, including "The Romance Of Tarzan", starring Lincoln, and "The New Adventures of Tarzan" starring Herman Brix.

Mr. Coriell also told the LASFS that Sol Lesser and Lex Barker will go to

(Continued on page 8)

Our new refrigerator had a new fur coat in it!

SMART WOMAN! She didn't have to go without either a fur coat or a new refrigerator. The money she saved by getting a modern air-conditioned ICE refrigerator bought a magnificent fur coat.

You can do the same! You, too, can have a new refrigerator *and* that new fur coat—or new furniture—or electric washer.

And when you have your new ICE refrigerator you'll enjoy the finest in complete, scientific food protection—in a beautiful, roomy refrigerator you'll be proud to own.

See your local Ice Company today. You'll be surprised to learn how much you'll save by buying a modern air-conditioned ICE refrigerator.

WHY YOU SHOULD HAVE A MODERN ICE REFRIGERATOR

ECONOMICAL TO USE

NO COVERED DISHES

LEFT-OVERS KEEP BETTER

NO REPAIR BILLS

VEGETABLES STAY GARDEN-FRESH

LOTS OF ICE FOR DRINKS

FREE!

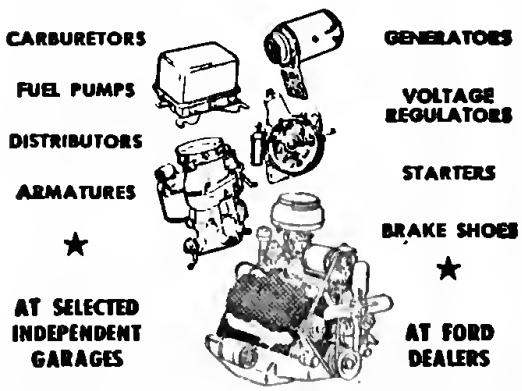
"Money Saving Tips"—a valuable 24-page marketing guide. Mail a post card now to National Association of Ice Industries, Dept. PR, 1706 L Street, N. W. Washington 6, D. C.

Genuine **ICE**

1850—ONE HUNDRED YEARS OF ICE PROGRESS—1950

● When you see this emblem on the reconditioned engine accessories and reconditioned engines you buy, it is the reconditioner's assurance of quality, performance, long life and value.

For this *Authorized* reconditioner's emblem means that the engine and accessories are thoroughly reconditioned to Ford's famed hi-precision standards . . . only Genuine Ford Parts are used . . . each unit has been rigidly tested by *Authorized* Ford reconditioners. That means you can buy with confidence—save time and money.



FORD Division of FORD MOTOR COMPANY

SUPER SCIENCE STORIES

(Continued from page 6)

Africa soon to film the backgrounds for the next Tarzan picture—in color! This will be a million-dollar production, the first Tarzan picture in color.

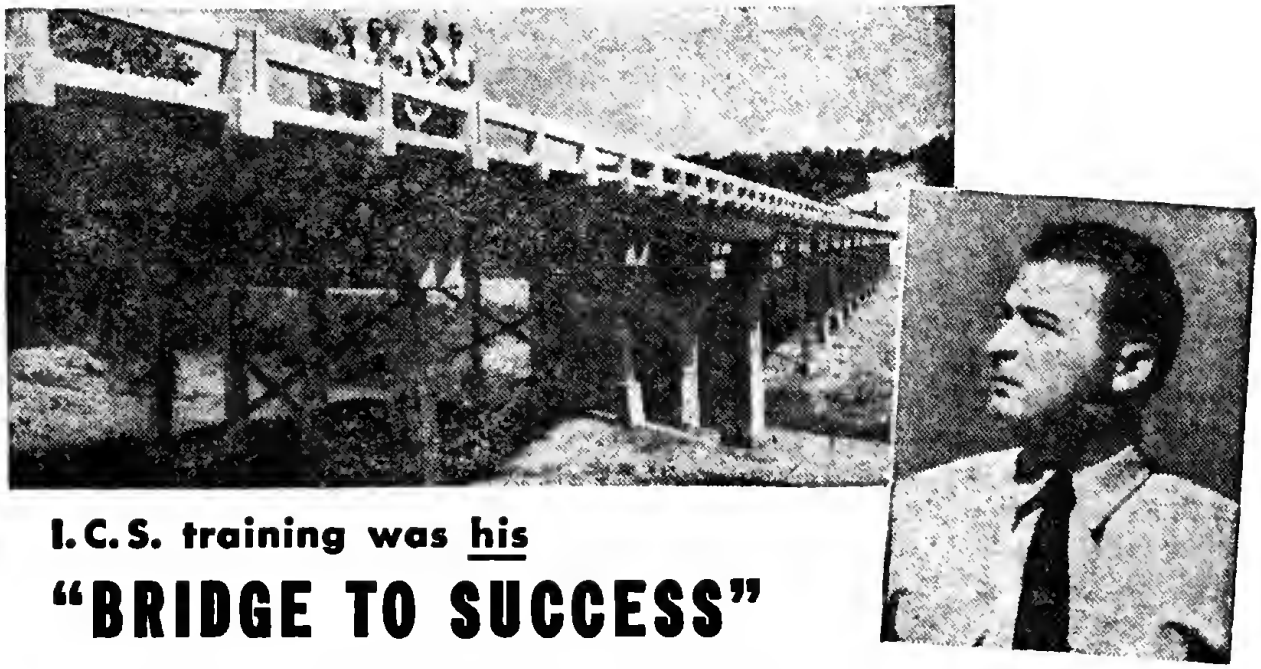
Donald B. Day replaces author Jack de Courcy as chairman of the coming 8th World Science Fiction Convention, the "Norwescon" Mr. de Courcy has moved away from the city and had to give up the chairmanship. Mr. Day is more than an able man for the job and we expect things to continue to hum out there. The "Norwescon" will be held over the Labor Day Holidays this year at Portland, Oreg. For more information, write to "Norwescon", Box 8517, Portland 7, Oreg.

Now for the fan mags:

The Fanscient, No. 11, Spring 1950, edited and published quarterly by Donald B. Day, 3435 N. E. 38th Ave., Portland 13, Oreg. 25¢. This vest-pocket-sized, photo-offset magazine is still one of the best general fan mags published in the United States. We liked all the many articles, features and illustrations in the issue, especially "J. Allen St. John, Dean of Fantasy Illustrators" by Darrell C. Richardson (this article tells us all about the illustrator of the Burroughs books and includes his photograph and samples of his work), and "Author, Author" which this time deals with the popular Theodore Sturgeon.

Orb, No. 3, February-March 1950, published bimonthly by Bob Johnson, 811 9th St., Greeley, Colo. 15¢. This legal-size, photo-offset, mimeographed and hectographed magazine becomes more interesting and neat with each issue. An excellent cover by Kroll graces the front page. Oh yes, you also get a crossword puzzle (stf. of course). We liked the poetry best of all the material. Suggestion: a better format would help.

(Continued on page 10)



I. C. S. training was his

"BRIDGE TO SUCCESS"

Hayden M. Hargett took his first I. C. S. course while he was still a student in high school.

He is now County Engineer of Franklin County, Alabama. Last year Mr. Hargett designed 27 homes, two theaters, a bus station and three bridges. He supervised fifty miles of highway construction and the paving of one hundred thousand square yards of city streets.

Mr. Hargett recently enrolled for another I. C. S. course

Listen to what he has to say about I. C. S. training: "It's more practical—more flexible than any training I've had. I can't speak highly enough of my I. C. S. training."

Mr. Hargett says his first I. C. S. course was his "bridge to success." "There might not have been much of a career," he said, "if it hadn't been for that first I. C. S. course."

I. C. S. training can be your "bridge to success." Mail the coupon today!

INTERNATIONAL CORRESPONDENCE SCHOOLS

APPROVED under the G.I. BILL

BOX 3276-D, SCRANTON 9, PENNA.

Without cost or obligation, please send me full particulars about the course BEFORE which I have marked X:

Air Conditioning and Plumbing Courses
- ☐ Air Conditioning
- ☐ Heating ☐ Plumbing
- ☐ Refrigeration ☐ Steam Fitting

Chemical Courses
- ☐ Chemical Engineering
- ☐ Chemistry, Analytical
- ☐ Chemistry, Industrial
- ☐ Chemistry, Mfg. Iron & Steel
- ☐ Petroleum Refining ☐ Plastics
- ☐ Pulp and Paper Making

Civil Engineering, Architectural and Mining Courses
- ☐ Architecture
- ☐ Architectural Drafting
- ☐ Bridge and Building Foreman
- ☐ Building Estimating
- ☐ Civil Engineering
- ☐ Coal Mining
- ☐ Contracting and Building
- ☐ Highway Engineering
- ☐ Lumber Dealer
- ☐ Reading Structural Blueprints
- ☐ Sanitary Engineering
- ☐ Structural Drafting
- ☐ Structural Engineering
- ☐ Surveying and Mapping

Communications Courses
- ☐ Electronics
- ☐ Practical Telephony
- ☐ Radio, General ☐ Radio Operating
- ☐ Radio Servicing ☐ Television
- ☐ Telegraph Engineering

Electrical Courses
- ☐ Electrical Drafting
- ☐ Electrical Engineering
- ☐ Electric Light and Power
- ☐ Lighting Technician
- ☐ Practical Electrician

Internal Combustion Engines Courses
- ☐ Auto Technician ☐ Aviation
- ☐ Diesel-Electric
- ☐ Diesel Engines ☐ Gas Engines

Mechanical Courses
- ☐ Aeronautical Engineer's, Jr.
- ☐ Aircraft Drafting ☐ Flight Engineer
- ☐ Forging ☐ Foundry Work
- ☐ Heat Treatment of Metals
- ☐ Industrial Engineering
- ☐ Industrial Instrumentation
- ☐ Industrial Metallurgy
- ☐ Machine Shop ☐ Mech. Drafting
- ☐ Mechanical Engineering
- ☐ Mold-Loft Work
- ☐ Patternmaking—Wood, Metal
- ☐ Reading Shop Blueprints
- ☐ Sheet-Metal Drafting
- ☐ Sheet-Metal Worker
- ☐ Ship Drafting ☐ Ship Fitting
- ☐ Tool Designing ☐ Toolmaking
- ☐ Welding Engineering
- ☐ Welding—Gas and Electric

Railroad Courses
- ☐ Air Brake ☐ Car Inspector
- ☐ Diesel Locomotive
- ☐ Locomotive Engineer
- ☐ Locomotive Fireman
- ☐ Locomotive Machinist
- ☐ Railroad Section Foreman
- ☐ Steam-Diesel Loco. Eng.

Stationary Eng'r's Courses
- ☐ Boilermaking
- ☐ Combustion Engineering
- ☐ Engine Running
- ☐ Marine Engineering
- ☐ Power Plant Eng'r'g ☐ Steam Engr.

Textile Courses
- ☐ Cotton Manufacturing
- ☐ Loom Fixing ☐ Rayon Weaving
- ☐ Textile Designing
- ☐ Woolen Manufacturing

Business and Academic Courses
- ☐ Accounting ☐ Advertising
- ☐ App. Psychology ☐ Bookkeeping
- ☐ Business Administration
- ☐ Bus. Correspondence ☐ Bus. Law
- ☐ Certified Public Accounting
- ☐ Commercial ☐ Commercial Art
- ☐ Cost Accounting
- ☐ Federal Tax ☐ First Year College
- ☐ Foremanship ☐ French
- ☐ Good English ☐ High School
- ☐ Higher Mathematics ☐ Illustration
- ☐ Industrial Supervision
- ☐ Motor Traffic ☐ Postal Civil Service
- ☐ Retailing ☐ Retail Bus. Management
- ☐ Salesmanship ☐ Secretarial
- ☐ Sign Lettering
- ☐ Spanish ☐ Stenography
- ☐ Traffic Management

Name_____ Age_____ Home Address_____

City_____ State_____ Working Hours_____ A.M. to_____ P.M.

Present Position_____ Employed by_____

Length of Service in World War II_____

Enrollment under G.I. Bill approved for World War II Veterans. Special tuition rates to members of the Armed Forces.

Canadian residents send coupon to International Correspondence Schools Canadian, Ltd., Montreal, Canada.

(Continued from page 8)

The Cataclysm, Vol. 1, No. 1, published bimonthly by Del Close and Robert E. Briney, 1726 Poyetz, Manhattan, Kansas. 10¢. This hectographed, half letter-size newcomer contains mostly poetry, most of which is not bad. The hectoing is pretty good and all in all it's a fair issue for a first. But we suggest stapling the mag on the side instead of the top and just a little more care with the format. We want to see more.

Pro-Card No. 1, "The Promags' Newszine" published by Bob Silverberg, 760 Montgomery St., Brooklyn 13, N. Y. Four issues for 10¢. This is another first, a fanmag printed on a penny postcard. This card-fanmag keeps the readers informed on when the pro mags will be out. This is very much needed now that there are so many of them, but Bob should get a little bit better information. This mag can be of service to all fans who can't keep track of their favorite pro mags. Keep your eye on this one.

Fantasy-Times, No. 102, published semimonthly by Fandom House, c/o James V. Taurasi, 137-03 32nd Ave., Flushing, N. Y. 10¢. This mag recently celebrated its 100th issue by publishing a super 30-page edition featuring such authors as Keller, Tremaine, Moskowitz, Gardner and others. The current issue features a photo on the cover showing Osa Massen and its West Coast reporter Forrest J. Ackerman on the set of the new stf. movie, "Rocket X-M".

The Detroit Stfan, No. 2, published by the Detroit Science Fantasy League, Edith Furcsik, Secretary, 5037 Maplewood Ave., Detroit 4, Mich. No price listed. This is an interesting official organ of the Detroit Science Fantasy League, and contains minutes of the meetings, fanmag reviews and other club news, Cover, fair, by Young.

The Outlander, No. 4, Official Organ of the Outlander Society, Stan Woolston, editor. Address: Freddie Hershey, Secretary, 6335 King Ave., Bell, Calif. No price listed. 30 mimeographed pages with printed cover. This fanmag gets more interesting with each issue. A must for fans who like their fanmags on the lighter side. For best in the issue, we pick: "The Care and Feeding of Young Fans", by Rick Sneary.

The Nekromantikon, No. 1, published quarterly at 1905 Spruce Ave., Kansas City 1, Mo. 25¢. This is a class fanmag, not only in material, but in neatness of format. Excellent fiction, articles and poetry, well illustrated by some of the finest linoleum cuts, by Banister, we've ever seen. This is a must.

Postwarp, No. 6, published monthly by the National Fantasy Fan Federation, Arthur H. Rapp, editor, 2120 Bay St., Saginaw, Mich. 10¢; sold only to NFFF members. This monthly contains many interesting letters from numerous stf. fans on many subjects dealing with fantasy. Though a good many of the letters deal with the NFFF, they are of interest to all. 12 pages well mimeographed.

Interim Newsletter, Feb. 1950, published by the Science Fiction International, James E. Love, 1006 Idlewild Ave., Newark, Ohio. Free to members of the SFI. Eight pages, well mimeographed, of club news and affairs. This is a neat official organ for an up-and-coming international fantasy organization.

I've been asked by a number of fan editors to ask you who write in for fanmags to please *print* your name and address. Many fan editors have received money for their publications and have been unable to send out the magazines, because they could not make out the name and address.

Also, very often the issues reviewed here are out of print by the time this column is published—so ask for the current issue when you write.

BOOK BARGAINS BEYOND COMPARE!

BUILD YOUR LIBRARY THIS NEW, MONEY-SAVING WAY!

Order any book right from your own home. You'll get it promptly, direct from New York (book center of the world). Postage and insurance are free. Here's the smart money-saving way to build a library your friends will marvel at. And it's just as perfect for selecting gift books, too. Here are just a few of the latest selections worth owning. ***Use the convenient coupon below . . .***

BUILDING OR BUYING A HOUSE

by B. K. Johnstone and Associates

Whether you plan to build or buy a home, this is the most complete and up-to-date value available today. It can save you literally thousands of dollars in what may be the largest financial transaction of your lifetime—the purchase of your house. (Illustrated with sketches and diagrams.)

Pub. at $2.75 **Special Price $1.25**

WHILE THEY LAST!

Special Gift Package—Original Editions

TALES FOR MALES . . . . . **Selected by Ed Fitzgerald**
". . . It is rowdy . . . . cynical. . . . Notable stories by clever writers . . ."—The Salt Lake Tribune.

THE BEDSIDE BONANZA **Edited by Frank Owen**
"A lodestone of love and laughter . . ."—Frederick Fell.

Two volumes, 870 pages
Published at $4.99 **2 volumes complete $1.98**

SPECIAL—WHILE THEY LAST!
THE HOLIDAY READER

Edited by Bernard Smith, Philip Van Doren Stern

750 pages of stories, poems and essays, especially edited for vacation enjoyment. Almost 100 authors, including some of the most celebrated names in English and American literature: Ernest Hemingway . . . MacKinlay Kantor . Dorothy Parker . . . Ogden Nash . . . Stephen Vincent Benet . . Pearl Buck . . Robert Benchley . . . D. H. Lawrence . . . Thomas Wolfe . H. L. Mencken . . . many others.

Pub. at $3.95 **Special Price $1.98**

SPECIAL THIS MONTH—
THE BIG MYSTERY CRIME PACKAGE

We will send you sight unseen four popular crime novels by famous writers, the selection to be made by our own staff. The published price of these will be at least $10.00.

Special—this month only—$2.98

CHICAGO, CONFIDENTIAL

The Lowdown on the Big Town

by Jack Lait and Lee Mortimer

A cheeky, impudent, uncensored account of the fast, fabulous city. Chicago is the hurly-burly, rough-and-tumble, guns-and-girls front page hero town of the U.S. And so, while CHICAGO, CONFIDENTIAL is of vital importance to every Chicagoan, it will have enormous interest to every American.

$3.00

Children's Picture Story Package (3—6 years)

FLOWER FABLES by Zillah Whited
Illustrated in full color.

THE "CLAYTOON" BOOK OF FAIRY TALES
Illustrations in Claytoon by Sass-Dorne.

Pub. at $2.25 **Special Price $1.19**

SPECIAL—JAMES T. FARRELL PACKAGE

2 Famous Novels—the Donny O'Neill Series

NO STAR IS LOST
MY DAYS OF ANGER

Pub. at $3.96. .1040 pages. . . . . The 2 Volumes Complete, $1.98

WHILE THEY LAST—THREE GREAT NOVELS!

VERMILION by Idwal Jones
"A vintage novel . . . full-bodied and to the connoisseur's taste."—Prentice-Hall, Inc.

I WILL BE GOOD by Hester Chapman
"An original and deeply impressive book."—Houghton Mifflin

BARABBAS by Emery Bekessy
Second large printing. Recommended by the Religious Book Club.

Pub. at $8.25. 1296 pages. The three volumes, $2.98

THE FORSYTE SAGA

by John Galsworthy **$2.98**

This is the motion picture edition of one of the most interesting novels of all time. Yes, the picture that stars Errol Flynn, Greer Garson and Walter Pidgeon, in book form—a big book, 921 pages complete, uncut. A rare opportunity while the limited supply lasts!

Buy your books this new, easy by-mail way!

Yes, order any book you want right from your own home. You'll get it promptly direct from New York (book center of the world) at no extra cost—free insurance and postage. Build your library this fast, easy, money-saving way. USE THIS COUPON.

MAIL THIS COUPON WHILE SUPPLIES LAST!

Popular Publications, Dept. D,
205 E. 42nd St., N. Y. 17, N. Y.

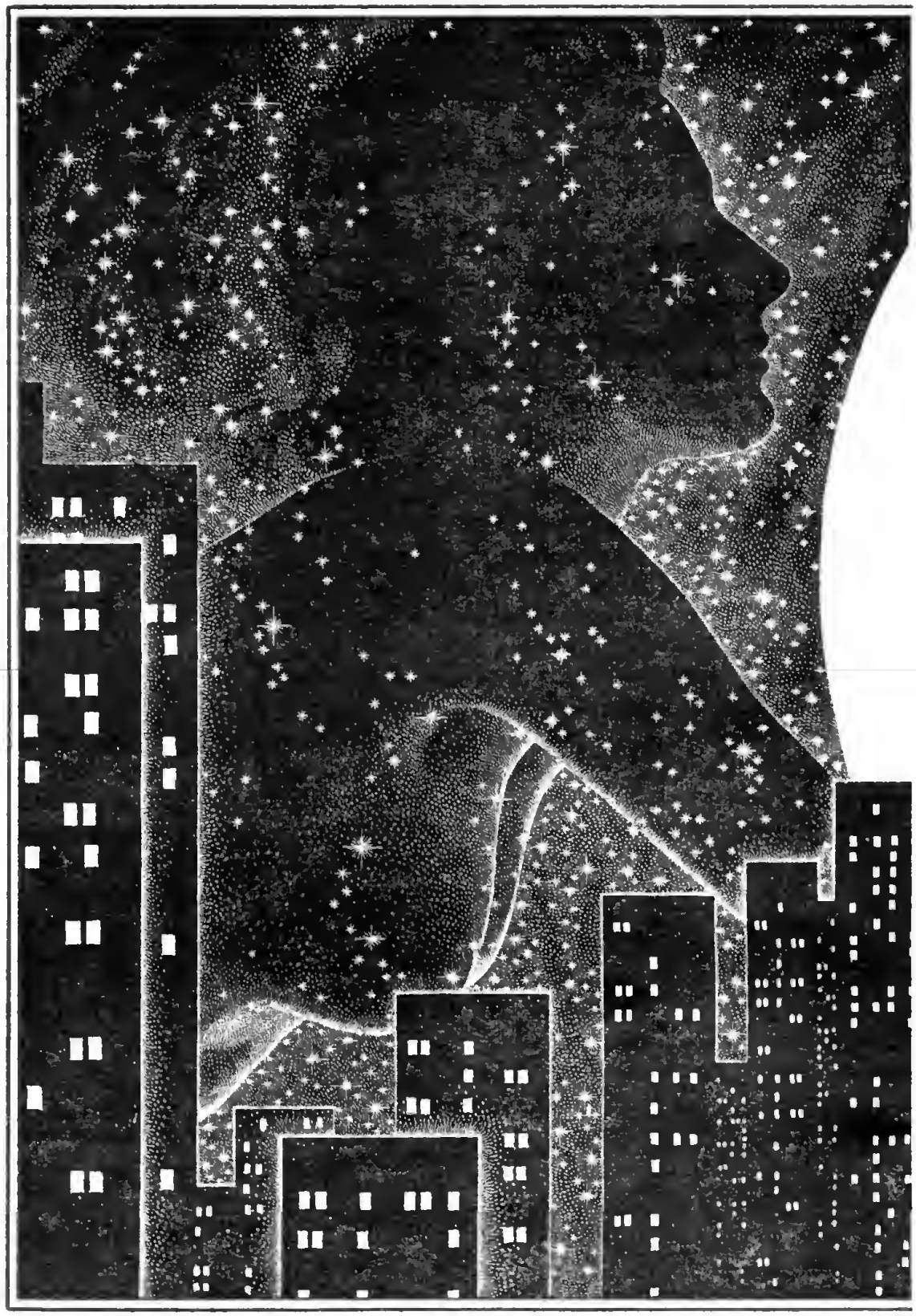
Send me the books checked below. I enclose remittance of $. . . . . .

- ☐ James T. Farrell Package $1.98
- ☐ Building or Buying a House $1.25
- ☐ Children's Picture Story Package $1.19
- ☐ The Holiday Reader, $1.98
- ☐ The Forsyte Saga, $2.98
- ☐ Tales for Males, The Bedside Bonanza, } $1.98
- ☐ Big Mystery Crime Package, $2.98
- ☐ Vermilion, I Will Be Good, Barabbas } $2.98
- ☐ Chicago, Confidential $3.00

Name

Address

City. . . . Zone. . . . . State. . . . . .



A Powerful Science-Fiction Novel

Slowly he built an eternal empire with the seconds he stole from other men's lives . . . but not all his art could aid him when his own span lay between dawn and dusk—the dusk before the endless night that he would never see!

HALF-PAST ETERNITY

CHAPTER ONE

Stolen Lives

THE KID didn't talk. Nat February talked. Which is what you might have expected.

The kid had a punch like the business end of a mule, sure, and he kept boring in, shuffling flat-footed, game all the way through. But everybody on the Beach knew that the kid, who, by the way, at thirty-one was a kid no longer, had suffered slow degeneration of the reflexes to the point where his Sunday punch floated in like a big balloon and he could be tagged at will.

Above him the timeless stars moved in infinite orbits.

By JOHN D. MacDONALD

The way the bout happened to be set up was on account of Jake Freedon, a fast, vicious young heavy, not being able to get his title bout. The champion was justly leery of young Jake and the only thing for Jake's managers to do was to line up every pug in the country and let Jake knock them over. Sooner or later the pressure would grow heavy enough for the title match to be a necessity.

The Garden crowd was slim. There was no question about Jake Freedon winning. The kid was all through in the fight game although nobody had told him that yet. The odds hovered around twelve to one.

This old man had come to Nat February, having been guided to him after three or four days of asking questions. Nat was hard at work on a cheese blintz and resented the intrusion. He had his usual little group with him and Nat was about to give the brush to the old gentleman when same old gentleman said with tremulous dignity that he wished to speak alone to Nat February. So saying, he pulled a wad of currency out of his wallet that looked entirely capable of choking the fabulous cow.

Nat gave the sign and his cohorts cleared out.

"I," said the old man, "wish to bet on Mr. Goth in the contest tomorrow night."

"Mr. Who?"

"Goth. He is scheduled to box a gentleman named Freedon."

"Oh! The kid! Let me get this. You want to bet on the kid. A poor old guy like you with holes in his socks wants to bet the wrong way. You're going to make me feel like the guy with his mitt in the poor box, uncle."

"Your emotional reaction is of little interest to me, Mr. February. I understood that if I stated my wager clearly, you would take my money and give me a slip of paper testifying as to my wager. I understand that in your—ah—profession, you are considered to be one of the most thoroughly ethical and—ah—well financed."

"What have you got there, uncle?" February asked.

"Thirty-two hundred and fourteen dollars. I had hoped to bet thirty-two hundred and twenty-five, but my expenses were higher than I had planned and it has taken longer to locate you."

"The whole wad on the kid, eh?" February was not at all troubled by removing the funds from the old gentleman. It appeared to him that if he did not do so, someone else would.

"Yes, young man. All of this I would like to bet on the circumstance of Mr. Goth striking Mr. Freedon unconscious during the first three minutes of their engagement."

"Holy mice, uncle! The kid to knock Jake out in the first round?"

"Exactly. They told me you would quote the odds on that particular thing happening."

"I don't want to take your money."

"I insist, Mr. February."

"Okay. Thirty to one."

"You will please write out the paper for me, Mr. February, and tell me where I can find you directly after the fight. I shall expect you to have ninety-six thousand four hundred and twenty dollars with you. I am not—ah—superstitious about thousand-dollar bills."

"You'll bring a satchel, eh? Maybe a carpet bag?"

"If you consider it necessary."

For a fraction of a second Nat February's calm was shaken. But he quickly reviewed the past record of both the kid and Jake Freedon. It seemed highly probable that if the two of them were locked in a phone booth it would take the kid more than three minutes to lay a glove on Freedon, much less chill him.

"What's your name, uncle?"

"Garfield Tomlinson.

Nat wrote out the slip, counted the

money, pocketed it, pushed the slip across the table. Tomlinson picked it up, examined it, sighed, put it in his wallet, now almost completely empty.

"And where will I find you?"

"Right here, uncle. In this same booth. They save it for me. I don't wish you any bad luck, but I hope you won't be looking for me."

Nat February had bad dreams that night. In the morning, trusting more to dreams than to judgment, he shopped around town until he found odds of fifty to one. He placed a thousand of Tomlinson's money there, accepting the jeers of the wise ones. In doing so he cut his maximum profit to twenty-two hundred and fourteen dollars, but his maximum loss went down to forty-six thousand four hundred and twenty He still felt uneasy. He looked up Lew Karon in the afternoon, talked Lew into offering sixty to one and placed a bet of eight hundred twenty-five. Now, if the old man's bet was bad, he still had a profit of thirteen hundred and eighty-nine. But if the old man had a reliable crystal ball—and he had acted like a man who at least had access to one—Nat would profit to the extent of three thousand and eighty dollars. If the old boy got wise and insisted on getting his original bet back, which he had every right to do, as well as the ninety-six thousand four hundred and twenty, then Nat would be out one hundred and thirty-four bucks. He felt comfortably covered.

He sat in his usual fifth-row ringside and dozed through the preliminary bouts, making a little here, losing a little there—but always more making than losing.

When the main came on and the kid fumbled his way over the ropes, his gray battered face wearing its usual dopy look, Nat cursed himself for cutting his profit with the overlay. Jake Freedon bounced in, smiling, confident, young, alert.

After the usual formalities the house lights dimmed and they came out for the first round. The kid shuffled out, slower and dopier than ever. They touched gloves. Freedon flicked the kid with a searching, stinging left jab and danced back. The kid stood, flatfooted. The referee motioned to him to fight.

Nat's eyes bulged and his hands clamped on the arm of the chair. He shut his eyes and shook his head.

When he opened his eyes again he saw what he thought he had seen in the first place. Freedon, spread-eagled on his face, his mouth in a puddle of blood, the referee jumping out of his stunned shock to pick up the timekeeper's count. The referee counted to eight, then spread his arms wide and Freedon's seconds jumped in to cart him back to the stool.

Nat shook the man beside him. "What'd you see happen?"

"Gosh!" the man said. "Gosh!"

"What happened?"

"Well, the way I see it the kid kinda jumped at Freedon, real fast. Fast as a flyweight. It looked to me like he nailed him with a left first. I can't be sure. And I don't know how many times he hit him on the way down. Maybe six or nine times. Every one right on the mush. Hell, his fists were going so fast I couldn't see them."

The doctor jumped up into Freedon's corner. Nat read his lips as he shook his head and said, "Broken jaw."

Nat joined the shuffling crowd heading toward the exists. He picked up two boys he sometimes used, arranged with Lew Karon for the transfer of cash in some way that would not pain the Bureau of Internal Revenue boys by focusing their attention on it, and went back to the booth.

Garfield Tomlinson was there. There was relief on his face as he saw Nat February approach.

"Think I stood you up, uncle?"

"I rather hoped you'd be here. I brought this—uh—small suitcase."

Nat whacked the old man on the shoulder. "You're the one! Yes sir, you're the one. Come on, uncle. We gotta go get the sugar."

"I trust this large loss won't disconcert you, Mr. February."

"Uh? Oh, no. Just a fleabite, uncle. Tomorrow I'll have it back."

As they climbed into the taxi, the four of them, Tomlinson said, "Should it make any difference to you, Mr. February, let me state that you could not have lost money to any more worthy venture."

"You win it for a church?"

Tomlinson laughed dryly. "Oh dear me, no! Not at all for a church."

They went to the hotel where February lived. The envelope was taken out of the safe and given to February. At that point the two young men became very wary, very alert.

Nat pulled Tomlinson over into a corner, shielded the transaction with a big padded shoulder. "Uncle, these are tired old thousands because the new ones are poison. I got 'em folded in packages of ten each with the rubber band on 'em. Here's one, three, seven, eight, nine. Now check those."

"Ninety thousand," Tomlinson said. His voice shook a little.

"Plus one, two, three, four, five, six. Now the hundreds. These I get outa my billfold. One, two, three, four. And here's the change. A twenty. Ninety-six thousand four hundred and twenty dollars. Correct?"

"Ah—I'm not acquainted with these things. The wager was at thirty to one. Don't I get my original wager returned?"

"Thirty to one to make it simple. You wanna be that accurate I should have told you twenty-nine to one, plus getting your bet back."

"Oh. Oh, I see. Well, I—ah—hmm, I guess I didn't need the satchel after all. Just a joke, was it?"

"I can see you got a great sense of humor, uncle. Now don't go running away. Don't you think you oughta tell me how you know that clown was going to clobber Freedon in the first?"

Garfield Tomlinson gave Nat February a look of utter surprise. "But my dear fellow! He couldn't possibly have failed to do otherwise!"

Tomlinson turned and walked out into the night. Nat handed the slimmer envelope back to the desk clerk. One of the guards licked his lips and stared hungrily after the old gentleman.

"Ah-ah-ah!" February said warningly. "No naughty thoughts, children."

He sighed. "Kinda cute, wasn't he?"

And to leave it there would have been fine. But Nat had a reputation as a wit and charming dinner companion.

By noon of the next day he was saying to a table of eight at Lidnik's, "This little old guy comes to me and what does he want but to bet his wad on a knockout by the kid in the first. Naturally I tried to talk him out of it. Candy from babies, yet. And so—"

JAKE was talking in a peculiar way. His teeth were wired together. His two managers, squat men with ugly expressions, stood by his bed.

"I tell yah," Jake mumbled, "I never see the punch coming. Not at all. I know, I've been hit before, but then I seen it when it was too late to duck. This time I never even knew I was hit. I'm moving in and boom—I'm walking up the aisle with rubber knees."

"An investment we had in you," one of them said with disgust.

"Come on, Joe," the other said.

They walked out and left Jake Freedon staring hopelessly at the ceiling.

IN A GRIMY suite in a Forty-first Street hotel of a little less than third class, a tall young man glowered at Lew Karon. Taken as a whole, Sam

Banth's face was well proportioned, almost handsome. But each individual feature was oversized, heavy. The big lips rested together with a hint of ruthlessness and brutality. Pale eyes protruded slightly, and they looked coldly incapable of any change of expression. His neck and sloped shoulders were ox-heavy. In contrast to the extreme cut of sharp-nosed little Lew Karon's clothes, Banth was dressed in quite good taste.

"Just tell me this, Lew," Sam said, "tell me why on a sixty to one shot you didn't cover it the other way."

"Take it easy, kid," Lew said loftily. "Take a look at the record. I hire you to help my collection department. You do good. You get a little stake. So I let you buy in. The piece you got of this business doesn't give you no right to tell me how to handle the bets, does it?"

"Just tell me why, Lew," Banth said. "That's all."

"Look, kid! Some sucker wants you to lay him fifty to one the Empire State Building falls down tomorrow at noon sharp. I ask you, do you cover a bet like that?"

"But it wasn't a sucker, Lew. It was Nat February. Couldn't you smell some kind of a fix?"

"After the investment they got in Freedon? And after the pounding everybody's been giving the kid? It doesn't figure, Sam."

"How do we stand? Can we stall February?"

"I'd rather bust J. Edgar Hoover in the nose. We pay off, in full. That'll drag the kitty down to about eleven thousand. You own a fifth of that."

"Twenty-two hundred," Banth said disgustedly. "I put in ten thousand."

"These things happen," Lew said philosophically. "All the time they happen. Look, Sam. For your own good. You got an education. Why don't you go back to that steady job you had?"

"Maybe I'm restless."

"I'll give you your twenty-two hundred, Sam. You look like you don't like the way I handle things."

"I don't."

"Here. I'll count them out right here. Three fives and seven ones. Twenty-two hundred. Better luck next time."

Sam studied little Lew Karon for a moment. He knew what the play was. Lew wanted him to back down, refuse the money, continue the arrangement. He picked the money up, folded it casually, shoved it into his pocket.

"Get yourself a new boy, Lew. I can do better with this than you can. I thought you were shrewd."

"Walk out! See if I care! You'll be broke in a week."

Sam Banth realized that he had been restless lately. Progress with Lew Karon had been too slow. The hard ambition that drove him was satisfied at first. Working with Lew had been more interesting and more profitable than work in the brokerage house. But Lew had his limitations. Sam had no intention of halting his climb at the petty gambling level.

"You've taught me a lot, Lew." He moved toward the sharp-featured man.

"Stick around and you'll learn more, kid."

"You're pretty happy about that slim patrician nose of yours, eh, Lew?"

"Huh? Nose?"

"Here's for what you did to my first ten thousand bucks, Lew."

He yanked the man close, striking as he did so. He let go and backed away, smiling without humor. Lew fell to his knees, gasping with the pain. His eyes ran tears and blood came between his fingers as he held his hand flat against the smashed nose.

Sam Banth walked to the door. He ignored the half-screamed threats of Lew Karon. Out in the sunlight he squared his shoulders, smiled warmly at an at-

tractive girl, hailed a cruising cab and gave the name of the restaurant where he was most likely to find February.

"I KNOW you," Nat said. "You're Lew's boy."

"Was. I heard talk about an old man who nicked you for that first-round knockout. I was wondering about him. What's his name?"

"Garfield Tomlinson, he said. He acted like it was the first bet he ever made in his life. He sure had the right dope."

"By the way, where can I find the kid?" Sam asked.

"Over in Jersey someplace. Find Bull Willman at Conover's Gym and he can tell you exact. You looking for a job? I got two horse players give one of my partners bad checks. Shake it out of 'em and you can have ten percent."

"Haven't you got your own people?"

"Sure, but Lew's been bragging so much about how you operate on collections I wanted to see you work."

"Later, maybe."

THE TAXI from the Elizabeth station pulled up in front of a frame house on a quiet street. "The kid did real good in there last night," the driver said.

"He's still got it," Sam said absently. He paid off the cab and walked up to the front porch. The house was jammed full of people, all in various stages of celebration. There was so much noise that Sam couldn't tell whether the bell worked or not. He opened the door and went in. A fat little man lurched against him in the hall, grabbed his shoulder and said, "Greatest li'l ol' battler ever was. Tipped me to bet on a knockout in the first. Spread twenny bucks around and got better'n five hunnert back."

"Sure, sure," said Sam, untangling himself.

Most of the noise seemed to be coming from the kitchen. A tall slatternly girl blundered through the open door, grabbed Sam and kissed him wetly. "Wasn' it wonnerful!" she sighed.

The kid was at the kitchen table, his gray knobbly face wearing a mild permanent grin. The table top was covered with bottles. His eyes were faraway.

"Everybody-have-'nother-drink," the kid said. His voice was high-pitched and he spoke so quickly that it was hard to follow him. "Gonna-be-champ-f'r-sure."

Sam moved through the press of bodies and made himself a drink. He sipped it and watched the kid narrowly. Somebody blundered against the table and a bottle at the kid's elbow tipped and fell. Without seeming to look the kid reached out and caught it an inch from the floor. Everybody applauded.

"Lookit that reaction time," somebody shouted.

Sam pursed his lips. He'd watched the kid work out more than once. The kid was at that stage of punchiness where it was almost painful to watch his slow response to any stimulus. He moved around the table and with what was apparently a careless sweep of his arm sent another bottle plummeting. As before, the kid's hand flashed out and he plucked the bottle out of the air and replaced it on the table.

Sam left the house, walking slowly, his head bent. He swung onto a bus and sat looking, unseeing, out the smeared window. At three-thirty he turned the corner on Forty-second and went into the Public Library.

At last he found the references he wanted. His hand began to tremble. Dr. Garfield A. Tomlinson—Pathologist. From the magazine index he located the *Journal of American Medicine* for February, 1946. *Relation Between Hormone Theories and Tissue Entropy in Geriatrics.* He read the article with great care. Much of it was meaningless to him, but he absorbed a few of the basic ideas.

It was no trick to find out that Dr.

Tomlinson lived on R.F.D. 2 at Kingston, New York. His next step was to re-contact Bull Willman.

"I was wondering where the kid trained for this last go, Bull."

Bull frowned and inspected the wet end of his cigar. "He's an old hand, not one of these kids you got to watch to see they get in shape. The kid always rounded himself out nice, usually right here at Conover's. But this time he said he was going to the country. He didn't say where. I tried once to get him through his wife but she said she didn't know where he went." Bull grinned suddenly. "Maybe I oughta send the whole stable to wherever he went, heh?"

"You've got yourself a property now, haven't you?"

Bull shrugged. "Maybe yes, maybe no. If I'm smart I'll sell the contract right now. For me it looks like the peak of the market. Freedon'll kill him next fight."

"How does a thousand dollars for one percent sound to you?"

"Like twice the market value. I got thirty percent of him. Who wants to buy?"

"I do." He took out his money. "Here's a hundred on account, the balance when the papers are ready for signature."

Bull shook his head sadly. "Everybody's crazy these days." He took the money.

CHAPTER TWO

Elixir of Death

TOMLINSON lived in a rambling farmhouse. The lawn was overgrown with weeds and the fences sagged.

Sam Banth paid the man who had brought him out from Kingston. He walked up the drive carrying a small suitcase. He climbed the sagging porch steps and used the door knocker. After a long wait, just as he was about to try again, the door was yanked open. Sam, in one searching glance before he smiled, took in the straight tallness of her, the woodsmoke eyes which had sooted the lashes heavily, the ripe tautness across the front of the blue work shirt, the lorelei curve of flank which blue jeans couldn't hide, the softness and petulance and discontent in the wide mouth. She was a big girl. A big restless unhappy girl with annoyance at him and the world showing plainly.

"Brushes?" she said. "Or chicken feed? Or maybe children's encyclopedias." Her voice was pleasantly deep, husky-harsh.

"None of those," he said. "Dreams. I sell dreams to visions who come to doors."

"Sell me one, brother. Mine haven't been too good lately."

"I've got a nice little item you might like. Acapulco, surf in the moonlight, dancing on the terrace, and a square-cut emerald the size of a walnut."

Her manner changed. "We're through playing now. What are you selling?"

"Are you Miss Tomlinson?"

"I was. Now I'm Mrs. Knight. But I'm not working at it."

"I came to see your father."

"Say hello to him for me. He's been in the barn ever since I can remember. You can go around the house." She started to slam the door. He put his foot in it.

"I don't like that little trick," she blazed. "Now what?"

"What do you want most in the world, Miss Tomlinson?"

"That's a stupid question. Money. Enough to smother me."

"What would you say if I told you that because I came here you're going to have exactly that?"

"I would say you've got nails in your head, friend."

He removed his foot. "You may now slam the door." She did. He walked around the house, grinning.

The barn was a solid structure and appeared to be in far better shape than the house. A doctor had been cut into the large original door. He knocked.

The door opened. "Well?" said Dr. Tomlinson. "What is it? You disturbed me at a bad time. Are you selling something?"

"No. Mind if I come in?"

"You can stand right there and state your business."

"You owe the federal government roughly fifty thousand dollars on the bet you collected last night, Dr. Tomlinson."

Tomlinson gave a jump of surprise. "Goodness! I never thought—I never realized that— Oh dear, now I'll have to do it all over again."

"What you did to Kid Goth?"

Tomlinson, in spite of his fussy and pedantic air, had a pair of keen blue eyes. He narrowed them. "Exactly what do you mean, young man?"

Sam Banth pushed by him and into the brightly lighted interior of the barn.

"Here! You can't come in."

Sam looked at the banked cages of experimental animals, at the tables of chemical apparatus, at the binocular microscope, at the shelves of texts and notebooks.

"Nice layout, Dr. Tomlinson."

"I shall complain to your superiors. You have no right to force your way in here."

Sam sighed, put his suitcase next to the microscope, pulled the chair away and turned it around. He sat down, crossed his legs, tapped a cigarette on his thumbnail and smiled gently up into the flushed face of Dr. Tomlinson.

"Independent research takes a lot of money."

"Of course it does. But I don't see how that—"

"Please, doctor. Let me hazard a series of guesses. Your funds are running low. You are at a critical and interesting stage in your experimentation. You have learned to apply new principles, apparently. The usual ways of getting funds are too slow. Maybe you're so far off the beaten path no institution will give you a grant. Maybe they would if you showed them what progress you've made, but you're not ready to do that yet. You contact Goth, manage in some way to give him a set of reflexes faster than any man ought to have, and then you bet all your funds and collect a small fortune. Then you were impractical enough to think you could come right back here, shut the door, and keep on with your work as if nothing had happened."

Tomlinson's shoulders sagged. He walked woodenly over to another chair and sat down listlessly. "I thought nobody would find out," he said in a dulled voice. "I was careful that nobody would see Goth. I trained him so that he wouldn't be—unusual."

"You forgot that he might go and get himself drunk."

Tomlinson looked up sharply. He compressed his lips. "I forgot to warn him about that!"

"You made a nice sum of money."

"I'll give you the tax, in cash. You figure it out for me, please."

For a moment Sam was tempted. But that would be like burning down the house to cook the dinner.

"I'm not a tax man."

"Then who are you?"

"Your new partner, doctor."

"There's no way you can force yourself on me, young man."

"My name is Banth. Samuel Banth. We will now consider my possible courses of action. I could arrange for a detailed medical examination of Goth. I could get so much newspaper coverage that you'd never have a moment's peace from now on. But I imagine that the way to make you unhappy the quickest would be to tell your daughter how much you made last night and how you made it."

WITH each stated alternative Tomlinson's gray head had sunk lower.

Sam laughed. "Come on, now. Cheer up."

"How can I?" Tomlinson said angrily. "You're intruding yourself on a most important work. I sense that you want to profit out of my—methods. My object, sir, is research, not profit."

"You're going about it in a funny way."

"Are you competent to judge that?"

"How much land have you got here?"

"Twenty acres. Why?"

"You've been puttering around with these mice for so long that your plans are mouse size. I want to help you, not hinder you. First, can you do for any athlete what you did for Goth?"

"Yes, but—"

"All right. Listen. We'll form two corporations. One will be called the Tomlinson Research Laboratories, Incorporated. That, for tax purposes, will be classed as a charitable educational institution. You will be the operating head of it. We'll build some dream labs for you and we'll staff them with bright young men from the best schools to handle the details of research. You'll make as much progress that way in a week as you do now in six months. The other corporation will be called Champions, Incorporated. Half this property will become a training area. I'll hold fifty percent of the stock in it. You and your daughter will hold the other fifty. No, I'll hold forty-nine percent in both corporations. That gives you and your daughter control, you see."

"But I don't—"

"Simple. We contact a professional athlete. We guarantee, for the maximum percentage of his future gross that we can wangle, to make him the best in the world. We maintain a floating fund and bet heavily on him. If you can do for others what you did for Goth, we can

NOW! this FULL-WEIGHT Blade

in Handy Dispenser

...at this amazing low price!

10 BLADES IN DISPENSER 25¢

REGULAR PACK 3 FOR 10¢

Try this sturdy, full-weight Blue Star on those tough, hard-to-shave spots. If *any* blue steel blade, at any price, gives you better shaves than Blue Star, we'll give you double your money back.

Blue STAR

SINGLE EDGE DOUBLE EDGE

PRECISION A·S·R PRODUCTS

AMERICAN SAFETY RAZOR CORP. • BROOKLYN 1, N. Y.

make at the minimum ten million bucks."

"The—the whole idea makes me dizzy, Banth. I don't see how—"

"Let me handle all tax matters, business angles and so on. You just take care of the research angle. Our first job is to pay off Uncle Sam on what you made last night, incorporate, and put the rest of it into the new corporations. We'll set ourselves a minimal salary to begin with and boost it as the money begins to come in."

Tomlinson was silent for a long time. He studied his folded hands.

"I must know that nothing will interfere with my work. It is important."

"Maybe you could tell me in layman's terms what the work is, Dr. Tomlinson. Then I could appreciate its importance."

Eagerness crept into Tomlinson's tone. "I began this line of research six years ago. As a pathologist the phenomenon of age has always fascinated me. I had done research in geriatrics, the study of old people, the study of how to help them physically. Take glandular secretions for example. We know that the flow of secretions from many organs diminishes in both quantity and quality as time passes. Once a duplicate of the flow from a young and healthy gland is injected into the aged patient there is often an almost miraculous increase in vitality. The endocrinologists have done a lot in that field. But basically it is superficial, as it does not get at the root cause of the slow degeneration of the glands and tissues and organs. It is a stop-gap, the same way a salt-free diet is a stop-gap in treating—say—congestive heart failure. The books talk about the ravages of time, yet a single cell, according to all growth and regeneration theories, should be almost eternal. Say that there is a time stream. Must all of us be carried immutably along that stream? Do you know what entropy is?"

Banth shrugged. "The standard example. The gas in a divided container, and then removed the division and though each molecule moves independently, they will never regain, even for a fraction of a second, their original positions all at once on each side of the non-existent division.

"In its broader sense it refers to the continual, supposedly unalterable progress from order to disorder. Thus we can call it an attribute of time, as we know it. Or a by-product of time. Thus my thinking began to be along the line of attempting to slow up that entropic progress in living tissue. I had no success. When you come up against a blank wall it is often good theory to try the exact opposite direction. Could entropy be speeded? I attacked that problem by an attempt to stimulate every gland and organ in a living organism to the same exact degree. I was clumsy at first. The interrelations are delicate. My laboratory animals died. Finally there was one experiment where there was quite a deviation from the control group. After the injection, what I term the master injection, the life span of the animals, which had the same hereditary and environmental factors, was decreased by one tenth. I performed the same experiment many times, keeping a frequency distribution on the life spans. The next step was pure accident. I was working with cats and by accident a tom from the injected group got into the control group cages. He killed two of the control group with apparent ease. I then began to test reaction time. Do you begin to see?"

Banth rubbed his heavy jaw with his fingertips. "Maybe I see. By increasing the rate of entropy, or by stimulating the organism or whatever you want to call it, you've shortened the life span, but telescoped all normal reactions into the reduced time period."

"Exactly. Take the case of Goth. I selected him rather carefully. A boxer on the down-grade without any other skill or talent by which he could make a living. Inevitably a charity or institution case before long. I speeded him up at first in

the ratio of a one tenth decrease in life span. The effect was to make him live sixty-six seconds in every sixty, thus speeding his reaction time by one tenth of a second. I rigged up a reaction time test and found that he was a shade below the norm. Thus the first tenth didn't seem enough. I made it a fifth giving him two tenths of a second advantage. That brought him considerably above the norm and even above extreme cases that have been reported. The most amazing thing to me was the new impression of mental alertness that he gave after treatment, even though I knew that the myriad pin-point concussions he had suffered had made him—ah—"

"Punchy."

"Yes, that's the word."

"Suppose he was going to live eighty years before old age got him, doctor."

"Now he'll live to be seventy, and show, at seventy, an apparent age of eighty. Goth seemed to feel that it was a very good trade. He had not intended to die of old age anyway. He merely uses up six months of his life every five months."

"How about his habits?"

"Habits? Oh, I see what you mean. He'll get six hours' sleep in five hours. There'll be physiological phenomena—accelerated heartbeat, respiration and so on. And, unless there is a training period, the change will be too noticeable to intimates. I had to keep Goth here and coach him in how to walk, talk, eat and so on. I had to continually urge him to slow down, to make each gesture with a conscious slowness."

"Doc, are we in business?"

"You can honestly do what you said for my research program?"

"Yes. You need more funds and more help."

"Well—then it's a bargain. Come in the house. I believe there is a bottle of fair sherry about somewhere."

They went into the kitchen. The girl turned from the sink. Tomlinson said, "Ah, there you are, Linda. My dear, this is Mr. Banth. He is my new—uh—partner."

"Him?" she said. "Sticking needles in mice?"

"Mr. Banth has ideas which are somewhat more expansive."

"I should imagine," Linda said dryly. She straightened up, drying her hands on the thighs of the jeans. She stared at Sam for a long, long second. "Keep a close watch on the gold in your teeth, Pop," she said, still staring full into Sam's eyes.

"He seems quite—straightforward, Linda," Tomlinson said. "You know, he might resent such a—"

Linda smiled and nodded. "You win, Pop. He is straightforward. Like the way a snake strikes. Welcome to our happy rustic little group, Mr. Banth."

"You'd better call me Sam, Linda."

"Sraightforward Sam, the Confidence Man."

"Do you young people dislike each other on sight?" Tomlinson complained.

Sam finally forced her to drop her eyes. "Not at all, doctor. We just talk like this because we each recognize a kindred spirit."

"That I could resent." Linda said.

"The truth is ever bitter."

CHAPTER THREE

School for Champions

SAM WATCHED the kid in centerfield. He had the expert's knack of starting at the crack of the bat. His name was Wally Christopher. It was the lower half of the eighth. The last man up slammed a hard one over the second baseman's head. Christopher came in fast, took it expertly on the bounce, came around with a greased throwing motion to second, nailing the runner to first. He trudged back out to his position.

It had taken six weeks to locate this boy and Sam Banth liked what he saw. He went over the statistics. Age nineteen, five foot eleven, a hundred and sixty-five pounds. Errors for the season, none. Batting average 166.

Christopher was up in the top of the ninth. He went down swinging after a ball, two foul tips and a called strike. He walked disconsolate from the batter's box. Banth grinned. He'd been pulling for a hitless day for the kid, to yank the average down a little further.

This was bush-league ball, and even with Christopher's outfield talent, he was slowly but very certainly slipping out of baseball because of that powderpuff batting average.

He left before the inning was over, confident that his note would bring Christopher to the hotel room in this small Pennsylvania city.

"Come right up and knock," he had said in the note.

A few minutes after six there was a hesitant knock on the door. "Come on in," Banth called.

Christopher came in. He was heavy-jointed with good hands and wrists, a reddened complexion, clear eyes and a diffident manner. "You Mr. Banth?"

"Sit down, Christopher. This is just a friendly little chat."

The boy seemed despondent. "Sure."

"You didn't look so sharp out there today."

"I knew that without coming up here, mister. Nothing for four. I've had other news. They're letting me go the end of the week."

Banth felt an inner excitement. This was better than he'd hoped. He sat down facing the boy. "What do you want to do with your life?"

"Play baseball. Ever since I was six years old that's all I ever wanted to do. Fat chance I've got now."

"This is the end of the road. Once they let you out here, you're all done."

Christopher squinted at him. "You trying to make me feel good?"

"How long do you expect to live?"

"Now that's a damn-fool question."

"Okay. We'll try another one. Suppose you played baseball and maintained the best batting average in the country. How long would you last in the game?"

"Hell, up into my forties I suppose. Some do."

"When they let you go, what are you going to do?"

"I don't know. Go back home. Get a job. Bread truck or something."

"Here's my card. I'm the president of a concern called Champions, Incorporated It's a very hush-hush organization. We run a training course."

"I can't afford anything like that."

"It won't cost you a dime. All you have to do is sign a contract stating that you will pay us fifty percent of all your future earnings in baseball."

"Fifty percent of nothing is nothing."

"We'll take that chance, provide free transportation, give you your training course and give you a chance to show your stuff to a good club after you're trained."

"What's the catch?"

"We think you've got what it takes. But there is one thing. Our training course is very, very strenuous. It won't cut short your active playing career, Christopher, but it may shorten your life a little. We want that understood."

The boy frowned. "But you'll take a chance on me just when I'm getting the can?"

"Yes."

"If you want to be soft in the head, Mr. Banth, I guess I can be crazy too."

"Have you got to finish out the week?"

"I think they'd rather I wouldn't."

"Then clear with them, pack up and meet me in the lobby tomorrow morning at nine o'clock. Here's fifty. Put that

against your expenses. There's plenty more coming."

WITH Christopher beside him Banth slowed the powerful convertible for Kingston traffic, then opened it up again. He came around the last bend.

"There's the layout," he said.

The twenty acres had been enclosed with hurricane fence topped by barbed wire and electrified wire. Two trucks loaded with building materials were just turning in at the gate. The gate guard, uniformed in slate blue, saw Banth approaching and yelled to the truckers to move along. A new white stone building stood a hundred yards back of the barn. Two foundations for other buildings were taking shape. Amidst the bustle of activity the sagging farmhouse looked forlorn, forgotten.

Sam pulled up beside it, gave a blast on the horn and said, "End of the line, Christopher."

The boy got out. He looked puzzled. "That sign says Tomlinson Research Foundation."

"Don't worry about it. We've got the right place."

As they reached the foot of the porch steps Linda came out the door. She smiled warmly. "Welcome home, Sam." She wore a soft gray dress that matched her eyes. Her black hair had been done in the latest fashion and her fingernails were long and the color of blood.

"Miss Tomlinson, this is Wally Christopher."

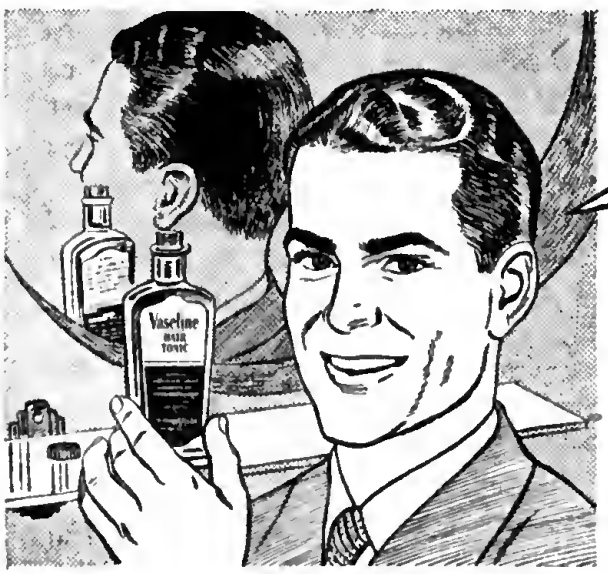
"Nice to meet you, Wally."

"Same here."

"Bring your bag along and I'll show you your room. I'm sorry the new dormitory isn't ready yet. That will be another month."

Sam was waiting at the foot of the

"...HE'S ALL AT SEA about Dry Scalp! He ought to know sun and salt water make hair dull and straggly. He needs before-swim and after-sunning care with 'Vaseline' Hair Tonic."



Hair looks better... scalp feels better... when you check Dry Scalp

TAKE THE SAME TIP for yourself and use 'Vaseline' Hair Tonic. Just a few drops daily check loose dandruff and other signs of Dry Scalp . . work wonders in the good looks of your hair. Contains no alcohol or other drying ingredients . . . gives double care to scalp and hair. It's economical, too.

Vaseline HAIR TONIC
TRADE MARK ®

Listen to DR. CHRISTIAN, starring JEAN HERSHOLT, on CBS Wednesday nights.

VASELINE is the registered trade mark of the Chesebrough Mfg. Co., Cons'd.

stairs when Linda came back down. She paused two stairs from the bottom. He reached up, took her by the waist with his big hands and lifted her lightly down. "Miss me?"

"Mmmm. Hard to tell."

"Was I right in calling you Miss Tomlinson?"

"It came through yesterday. Restoration of maiden name and all."

"Like the looks of our boy Christopher?"

"Poor little lost sheep."

"Poor little lost gold mine. Inside a year he'll be trying to find a lawyer smart enough to find a hole in that contract. But there won't be any. He signed in the city before we came out. Next year they'll be paying him at least sixty thousand. Thirty thousand for us, darling."

"Fifty percent!" Her eyes widened. You weasel, you!"

"I better go out and pay my respects to the esteemed Doctor Tomlinson. How did that fuddy get a kid like you?"

"Throwback. My great, great, great, great grandfather was a pirate."

"I'll tell him about the Christopher boy. I want this one fixed up fast so he can start bringing in the dough. Expenses are high."

She held him close. "And they're going to be higher, man."

"Acapulco?"

"And the emerald too. I'm holding you to that." She was warm against him. "I missed you, you thief," she whispered. "Oh, how I've missed you!"

"This much?"

"Even more than that, Sam. More than that. You've got cold eyes, Sam. Pale eyes. What goes on behind them?"

"Ideas."

"With me in them?"

"With you in them. I think it's you. A big girl. Black hair, soot on her eyelashes. Eyes the color of campfire smoke."

"Where there's smoke—"

WALLY CHRISTOPHER sat on the edge of the bed. The tall dark girl had explained the schedule. Pretty girl. Wise looking. Made him uncomfortable somehow, as if she was laughing at him inside herself. Lots of girls like that in the world. Get in the big time and all you got to do is whistle. The big time!

She said to come down and eat at six. He looked at his watch. She hadn't said anything about wandering around for a while. It was close to five. He went downstairs and out without seeing anyone. A swarm of men were working on the new buildings. He watched them for a while, wondering what time they'd quit, and then he saw them rigging floodlights so the masons could work at night.

From a distance he saw Mr. Banth coming out of the white stone building beyond the barn. Mr. Banth had his arm around the shoulders of an older man, a small man with gray hair that was nearly white. Mr. Banth was talking excitedly. Quite a guy, that Sam Banth. Convincing.

Banth waved to him casually so Wally guessed that it was all right to wander around the place. Diagonally off to the left beyond the white stone building he saw a tennis court. A girl and a fellow were talking over the net. The fellow turned and walked away toward the rear of the white stone building. Wally ambled toward the tennis court. She came walking rapidly toward him, slim brown legs twinkling. She wore white shorts and a halter. She was a striking tan, particularly in contrast to her carrot-red hair.

She stopped and stared at Wally. He saw that her small, pert-featured face was older than he had realized. The weather wrinkles were deep at the corners of her eyes, and the lines were stark from snub nostrils to the corners of her mouth.

"You play tennis?" she asked in a remarkably high-pitched voice. She spoke very rapidly.

"Play at it," he said grinning. The grin

faded. "Say!" he said. "I've seen you someplace. Wait a minute. Allison? No. Anson. That's it. Barbara Anson."

"Give the boy a cookie," she said.

"I thought you quit tennis a long time ago."

Her voice became slower and dropped in pitch. "I didn't quit on purpose, son. My legs gave out." They walked side by side. She kept getting a few steps ahead and then slowing down.

He gave her a bashful smile. "Gave out? They look good from here."

"Listen to him! What's your name? How old are you? What's your sport?"

"Wally Christopher. Nineteen. Baseball."

"Nineteen, eh? Then I am just barely old enough to be your mother."

"Don't kid me, Miss Anson."

She gave him an odd smile. "What's your trouble in baseball?"

"Can't hit. Do you think they'll be able to straighten me out?"

"You don't know how it's done?"

"Nobody's told me a thing yet."

"I'll let them tell you, Wally. Don't worry about it. Don't worry about a thing. Every little kid in the country will know your name inside of two years."

AT NINE o'clock in the morning Miss Tomlinson sent Wally to the white stone building. The old man he had seen Banth talking to was there. And some young men in white coats with high collars.

He was told to strip and then they had him climb onto a table and lie down. There was a long and uncomfortable period of tubes and needles and a thing wrapped around his arm. Then they had him breathing into a tube while a pen drew lines on a piece of graph paper wrapped around a cylinder, behind glass. They took all sorts of samples. They used words to each other that were strange. Wally had heard a few of them but he couldn't remember what they meant. They put gunk on his temples, stuck metal things into the gunk and another pen drew a different sort of line. After he came back from lunch they waited thirty minutes and then pumped the lunch out of his stomach. It made him sick for a little while and then he was famished again. Another gadget, once it was fastened onto him, made a pen line that had a peak for every time his heart beat.

"Come back here at three in the afternoon the day after tomorrow," Dr. Tomlinson said. "Your time is your own until then."

During the two days he played tennis with Barbara. She was amazing; she seemed to know where the ball was going to go the instant he hit it. Banth had gone away again. The buildings were roofed, both of the new ones, and interior work had begun. The dark girl, Miss Tomlinson, wandered around looking glum. There was a lake ten miles away. He drove Barbara's car and they went swimming. Later he kissed her and she pretended to think it was funny and called him a silly kid, but he guessed from the way her eyes looked that she enjoyed it all right. She didn't kick the second time or from then on.

He went back at the time Tomlinson had said and they gave him two capsules with a glass of water. The room swung slowly back and forth and darkened and was gone.

When he woke up it was night. He was back in his room. He was very sleepy. He tried to think and remember, but his head hurt. He went back to sleep.

In the morning he got dressed and went downstairs. It was the same as any other morning except that he managed to break the laces in both shoes and that annoyed him. Miss Tomlinson was the only one in the dining room.

"Come and sit with me, Wally," she said. Her voice was deep and slow.

"Have you got a cold?" he asked.

"That's what Barbara Anson asked the first morning. No, I'm just as I've always been Wally."

"You're different. You act sleepy and slow."

"Look at the clock, Wally. Look at the pendulum."

"It's running down, isn't it? About to stop?"

"No. It's just the same. You're different, Wally. The world is the same. You're speeded up. Do you know how you've changed?"

"What is this?"

"Your voice is so high that you sound almost like a girl, Wally. Every move you make is too fast. You look and act like a man with a bad case of jitters."

"What's happened to me? What is this?"

"Everything in the world will look as though it has slowed down, Wally. So will that baseball floating down toward the batter's box."

Slowly he began to understand. "They —Dr. Tomlinson, he speeded me up?"

"That's right. Now don't look so upset. It will work out just the way you want it. But now your real work starts. You must learn to walk and talk and smile all over again. You must learn how to eat and how to drive a car. Then you'll have to learn how to play baseball. You must start all over again and learn timing from the ground up. You can start right now. Keep saying to yourself every moment, 'Slowly, slowly.' See, you're stirring your coffee right over the sides of the cup. Now move at the same speed I do. That's right. Slow your hand down as you raise the cup. When you speak to me pretend you're imitating a slow deep western drawl. Pitch your voice as low as you can. Only fair, Wally. Try again."

IT WAS A difficult ten days. They made him stay away from Barbara. Those who had been treated had to associate with people who had normal timing. That way it came faster. At the end of ten days his slips were very infrequent. His habits changed. Each night, at ten, he was exhausted and his body yearned for sleep. Yet by six in the morning he was slept out. He was ravenous an hour before lunch, an hour before dinner. And slowly he learned always to walk as though he were wasting an idle hour in a park, move his hands like a sleepwalker.

One of the young men took movies of him standing, sitting, talking, walking. He found that his head movements were too rapid, too jerky, and he had to learn that when he heard a sound behind him he must give himself a slow count as he turned around.

Banth came back with two glum young recruits. Wally found out later that one of them was a discouraged pro basketball player, the other a pro hockey player who had slowed down to the point where none of the top teams would have anything to do with him.

That night, at dinner, Sam Banth said, "Wally, you've done well. Tomorrow morning you and I have an appointment at Yankee Stadium. I want to get some bids for you. I've wangled three top managers into being there. I guess curiosity is bringing them around. Paul Paris will pitch to you."

"Paris! Mr. Banth, he's the hottest arm in the game right now! He's hanging up new records. How about that no-hitter out in Cleveland?" Even in his excitement he managed to keep his voice pitched low and say the words slowly.

"I don't think he'll worry you any. I'm paying him five hundred to pitch ten times. That's fifty a pitch. If I was worried, Wally, I wouldn't pay out that much."

"Yes, but—"

"Now you've got some memorizing to do. He'll throw ten pitches. I want the first one lined out of the park. I want a

clean miss on the second one. I want the next two hit deep. Another miss, another homer, two more strikes and then another one out of the park. That's nine. Then see if you can bang the last one for a long foul."

"Mr. Banth, nobody can call their shots that way when—"

"Now tell me what you're going to do on each pitch."

"It doesn't work that way. He won't throw the whole ten right across the sack."

"His control is good. If he throws a wild one, it won't count. But if they're a little bit outside, go after them."

IT WAS a misty morning. Wally felt the sweat running down his sides. He wore spikes, but Mr. Banth hadn't wanted him to put on a uniform. There was a fill-in catcher. Lean Paul Paris, with a smirk on his face, was warming up. Banth stood over at the side laughing and joking with the three managers. One of them had remembered seeing a scout's report on Wally and had wanted to leave right away, but Sam Banth had talked him out of it.

The vast empty stadium was filled with a hard silence. When Banth laughed an echo came back from centerfield. The ball thwacked against the mitts. Wally sweated and swung the bat a few times.

"Okay," Paris shouted. "I'm ready. Let's get this screwball deal over with."

Banth said quietly, "Okay, Wally." Wally walked to the box, tapped the dirt out of his spikes. The catcher pulled the mask down over his face and said, "Now I seen everything."

Paris went into a windup that looked very slow to Wally. His long arm slanted down and the ball came down the groove. It was a fine, fat pitch. Wally tightened and swung. Usually the ball disappeared completely when it was within six feet of the bag. But this time he watched it the whole way and he saw the bat swing-

ing to meet it. He saw that the swing was too fast and too soon and a shade high. He pulled the swing a little and moved the bat down a trifle. There was a fine deep-throated crack and the ball soared away. Paris turned and put his hands on his hips and watched it. It went into the left-field stands, fair by inches.

"Lucky," the catcher grunted. Paris put a new ball into play. It was another fat pitch. The temptation was too strong. The bat stung his hands. Paris ducked after the ball was already beyond him. Wally glanced guiltily over at Banth. Sam was scowling at him. He looked back in time to see the ball hit the centerfield wall hard enough to rebound half way back to second base.

He made himself miss the third one. It was an outside pitch, but he swung anyway. Banth looked relieved. Paris was wild on the next one. Wally slammed the next into deep right center, then swung and missed, put the next into the right-field stands, racked up two strikes, dropped the next into the left-field stands and banged the last one high and foul into the right-field stands. Paul Paris looked seriously shaken. He tore his glove off and glared toward Wally.

"Brother," the catcher said with deep sincerity, "some of those were the best hit balls I seen in a long time."

Wally moved over toward the three managers and Banth. Banth told him to go take the spikes off. When he came back out only one of the managers was left. He had a smug look and a happy gleam in his eyes. He slapped Wally on the shoulder. "Welcome aboard, son."

CHAPTER FOUR

Empire of the Damned

THE MEETING was held in a room so new that it still smelled of damp plaster. Dr. Tomlinson walked briskly in, pushing the door open. Linda looked quickly over her shoulder and pushed herself away from Sam Banth. Her eyes had a heavy-lidded look. Her lips were parted and her face and throat were flushed. It troubled Tomlinson to see her like that. Banth gave him an impudent grin.

"Prader'll be along any minute, doc," Sam said. Prader was the combination lawyer and accountant hired by Sam when the two corporations were being formed.

The three of them sat at the board table. Linda kept her smoky eyes on Sam Banth. Dr. Tomlinson sorted his papers.

Prader came in with a short mincing stride, his briefcase under his arm. He apologized profusely for the delay. He found his chair, unbuckled the briefcase and took out a minute book. He was a giant of a man down to the waist, but his legs were absurdly short. Once he sat down he had a commanding presence, emphasized by a jutting jaw and black, unwinking eyes. Afoot he merely looked absurd.

"Let's take Dr. Tomlinson's pet first," Sam said. "The meeting of the Board of the Tomlinson Research Foundation, Incorporated, will please come to order. We better take the financial report first, doctor."

Tomlinson found the proper page. "Ah, yes. The donation this month from Champions, Incorporated was thirty-seven thousand, five hundred. Twenty-six hundred and ten went for salaries and wages. Twenty-four thousand was applied against the building. Eighteen thousand, three hundred of new equipment was ordered. The total comes to forty-four thousand nine hundred and ten. There was thirteen hundred and three on hand from the previous month. Thus the deficit to date is six thousand one hundred and seven, plus, of course, the additional fourteen thousand outstanding on the lab. I've given the figures to the nearest dollar for simplicity's sake."

Sam said harshly, "The purpose of the large donation was to build up a cash reserve. Instead you spent every dime of it and more too. I don't know as I care for that. What's that eighteen thousand three hundred for equipment?"

"Let's take things in order, Mr. Banth," Prader said smoothly. "I see you have the progress sheets on your phase of construction, Dr. Tomlinson. If you'll pass them over I'll enter the pertinent data in the minute book. I—ah—believe that we can dispense with the reading of the minutes of the previous meeting. Any new business?"

Tomlinson interrupted Sam. "Yes. We're on the track of a new method of excitation. Rather than go into detail I'll merely say that rather than the concocting of the precise stimulants for the secretion pattern of the individual, it is based on placing the individual at the focal point of a vibrating magnetic field. Nerve tissue so stimulated has shown an almost incredible impulse speed. Our barrier in the injection method was a speed-up of fifty percent. So far we cannot determine the barrier in the new method."

"I don't see any particular excuse for any new method," Banth said.

Tomlinson gave him a surprised look. "But this is a research group! There is always a reason for research, Banth."

Sam looked down at his big fists for a moment. He looked up quickly. "I would like the privilege, as a large stockholder, to countersign all checks issued by the Tomlinson Research Foundation, and approve all orders for materials."

"I was told I would have a free hand."

"To milk Champions, Inc., of every dime, eh?" Banth said. "Not so fast, doc. Not quite so fast. Maybe it was agreed, but it can be put to a vote." He looked meaningfully at Linda. "So let's vote on it, doc. My forty-nine per cent votes that one Sam Banth be dealt into your financial picture."

"And my forty-one p·-cent," said Tomlinson "is, of course, against such a change in our picture. Really, you disappoint me, Banth."

Both men looked at Linda. She had turned a bit pale. She looked quickly at Sam and then, more shyly, at her father. "Some compromise, maybe," she said weakly.

"Vote, baby," Sam said.

She gave him a look of anger. "Don't try to tell me what to do! I'll vote with my father. Against you."

Sam's eyes narrowed dangerously. Then he grinned. "Good girl. I like a good loyal girl. You win, doc. But let's have a gentleman's agreement. Let's turn over the same amount this month and you see if you can hang onto some of it."

"That will suit me," Tomlinson said quietly.

"That should wind up the foundation," Prader said. "Now, Mr. Banth. How did your enterprise function? Financial report first, of course."

"Our cut of the wages of all eleven employed graduates came to seventy-eight hundred. That end is chicken feed so far. Eventually it'll be the big end of the stick. Income from wagers amounted to one hundred nine thousand, three hundred and five."

Prader whistled involuntarily. Tomlinson's eyebrows went up.

"Now think it out for a minute," Banth said. "This month was the end of the gravy train on wagers. The boys are on guard now. I'm going to have to bet through dummies. The bets will have to be smaller. At the beginning of month there was eight thousand two hundred in the kitty, after turning over the thirty-seven five to the foundation. That, plus income, equals one hundred twenty-five thousand, three hundred and five. Another thirty-seven five to the foundation leaves eighty-seven, eight oh five. Expenses were fourteen two. Reserve for

taxes twenty, leaving fifty-three, six oh five. I suggest a twenty buck dividend on each of the thousand outstanding shares. It will take us down to thirty-three, six oh five, enough to cover operating expenses for the coming month. Eighty-two hundred bucks for the doctor, ninety-eight hundred for me and two thousand for Linda. Shall we vote? Hands up? Done.

"Now for the progress report. As I said before we have eleven 'graduates'. There are twelve in training and we ought to have four of those out bringing in income by the end of the month and an additional six or seven lined up. The twelve consist of three boxers in three different weight divisions, a professional magician whose hand wasn't quicker than the eye, a pro miler—his income will be peanuts but the side bets might be all right on a four-minute mile, one golfer whose trouble was not enough distance on the drives, a baseball pitcher who had lost his fast stuff, a team of three circus acrobats, and two pro footballers who were about through.

"Every one of them and also our 'graduates' understand that if they do any talking we can flood their particular specialty with graduates and put them right back where they started. We've kept the press from finding out anything. Sooner or later they'll suspect and track it down, of course. Then we'll have to throw up some smoke screens. As to future plans, I want to go down to Mexico and grab a couple of bullfighters. Headliners in that trade make thousands for an afternoon's work and reflexes are pretty important. Collections and accounting may be a problem, but I think we can handle it all right. I have—some experience in making collections."

Prader organized the minutes into proper form. The dividend checks were drawn up and distributed. Salaries were given an upward boost.

The meeting broke up and Tomlinson went back to his research in the labs.

SAM AND LINDA walked slowly down toward the farmhouse. She held the folded check in her hand.

"You're the girl who wanted to be smothered with money," he said, giving her a crooked smile.

"Two thousand isn't going to smother me, Sam."

"There's a lot more in the picture."

"How do you mean that?"

"Take those two payments to the foundation. They total seventy-five thousand. Ten percent of that is seventy-five hundred, plus what you've got in your hand would make your take for two months total ninety-five hundred."

She stopped. He turned and faced her. "What are you trying to tell me, Sam? What are you trying to get across? The whole agreement was made because you showed dad how it would help his work. If you cut off all funds—"

"Let's not get sentimental, Linda honey."

"I'm being practical. He treats the people you bring here. If he didn't get the agreed money, he might stop treatments, and then where would you be?"

Sam scuffed the ground with his toe. "Have you taken a look at the kids he hired? Have you seen that one named Howard Dineen? Have you seen him looking at you?"

She flushed. "I guess I have."

"He's a big dumb-looking towhead and his red ears stick out but the doc says he's the keenest one in the group. And if *you* told Dineen to jump up in the air and land on his head, he'd knock himself out."

"Sam, darling, you're—frightening me."

He shrugged. "I don't know why. I was just showing you that if we're smart and if your old man should decide to walk out on the deal, Dineen could be made to go along with us. You'd just have to

smile at him every Tuesday. That's all."

"Why would dad walk out?"

"If you should vote with me a few times, honey, he might get sore. But that would be a shame because he'd walk out with forty-one percent of the stock and forty-one percent of the profits. You'd inherit, I suppose. Eventually."

"Don't talk like that!" she whispered. "Don't!"

He gave an elaborate shrug. "Now why act like that? I didn't say a word. I was just thinking that if you ever did inherit we could keep Dineen working for peanuts. You'd take fifty-one percent each month of the total. Our target is one hundred 'graduates.' After we get to that point, we won't treat any more of them. Some will make a lot, some won't make much. They will average a gross of twelve thousand a year. And we'll average forty percent of that. Call it an even half million a year. And little Linda would be getting a quarter million a year, all her very own before Uncle Sugar's cut. I'm just thinking out loud. Would that smother you?"

She laughed nervously. "It might bring on shortness of breath."

"He's an old guy. What is he? Close to seventy?"

"Don't, Sam. Don't!"

"You act like I might be trying to talk you into something, kid."

"Sam! Are you?"

He shut the kitchen door behind them, swung her around and backed her against the closed door. His mouth was an inch from hers. He said softly, "How do I know whether I'm talking you into anything? Can you be talked into anything?"

"I'm frighteed, Sam. Scared green. Hear my heart. It's pounding."

He took a small box out of his pocket, opened it with his thumbnail. The stone was a living and perfect green. "Remember that dream I tried to sell you? Will you buy it?"

"Oh, Sam!"

"There was no more to the dream. I got to go line up a couple of bullfighters. Acapulco is maybe an hour and a half, two hours, by air from Mexico City."

"But I couldn't leave with you," she whispered.

"Go visit a girl friend. A girl friend in Seattle, or New Orleans. You got two thousand. Take yourself a vacation."

She bit her lip. "I might do that."

"If you want to write me or anything, I'll be at a hotel called the Del Prado in Mexico City. I'll get there next Tuesday."

"I'll send you a special delivery."

"You do that."

HOWARD DINEEN crouched and looked moodily in at the cage of white mice. One would stop for a moment and he could see it. Then it would

MAN FROM MISSOURI ASKED TO BE SHOWN!

And He Was! Carl W. Rau Has Now Switched to Calvert Because it Tastes Better.

ST. LOUIS, MO.—Carl W. Rau, Missouri chemical engineer, is no longer a skeptic about the big switch to Calvert. "Friends showed me," he said. "Calvert really does taste better, really is smoother any way you drink it."

LVERT RESERVE BLENDED WHISKEY—86.8 PROOF—65% GRAIN NEUTRAL SPIRITS. CALVERT DISTILLERS CORP., N. Y. C.

completely disappear and reappear on the opposite side of the cage. He knew that this group had been speeded to a point where the eye could not follow their normal movements. Dr. Tomlinson had fretted about the possible structural damage that would be self-inflicted by the mice through their mere velocity of movement, but it was beginning to appear that the new vibration-born acceleration also caused a compensation in the structural qualities of bone and tissue so that the expected damage did not result.

Dineen was moody about the changes which this past seven months had made in him. Before coming here there had been nothing but the work, the intense, almost feverish devotion to the work of research. And now another factor had intruded. Linda Tomlinson. Even as he stared into the cage he seemed to see her walking toward him.

He had tried all manner of things to chase her out of his mind. He lay at night picturing her in the embrace of that crude Banth person, and instead of making it better, it made it worse so that he heard himself groan aloud. He had walked the nearby roads and fields until he was exhausted, and still he dreamed of Linda. He had forced himself into an intrigue with one of the new lab girls who had recently reported, but it had been awkward and tawdry and utterly disappointing.

She had been gone for ten days now. And so had Banth. He tortured himself with conjectures about whether they were together. Dr. Tomlinson had said that Linda was visiting a school friend. Dr. Tomlinson did not seem to be worried.

Howard Dineen knew that it was hindering his work, his powers of concentration. He made mistakes in timing and in recording and found it necessary to repeat an awkward number of experiments. He told himself a thousand times that she was a tramp, Banth's girl, a divorced woman. Nothing worked.

"Hello, Howard," her voice said, close behind him. He thought how odd it was that his imagination could consistently give him such convincing impressions of her.

"Didn't you hear me?" Linda asked.

He spun around awkwardly, rapping his elbow smartly against the side of the cage. He rubbed it and said vacuously, "You're back!"

She wore a dark suit, so severely tailored that it accented rather than concealed the intense femaleness of her. Her dark hair had been cropped fashionably short. Her eyes puzzled him. They had lost a certain awareness while she had been away. They had an almost glazed look, as though she were an automaton set in motion by a superior force for a specific purpose.

"Yes, I'm back, Howard. How has the work been going?"

"The work? Oh, fine. Great. How was your trip, Miss Tomlinson?"

"Do you have to be so formal? My name is Linda. It was a nice trip."

"I'm glad—Linda." He flushed, knowing that the way he had said her name, the way he had mouthed it so gently had told her too much.

"I'm glad to see you again, Howard. Dad is always so engrossed, and Mr. Banth is so busy. It seems like you're the only real friend I have here."

The suspicions of Sam Banth melted like snow in a furnace. He grinned. "I want to be your friend, Linda. Your—good friend."

"I don't see any reason why you can't be, Sam. Dad says you're ever so clever."

He flushed again. "He overrates me, Linda."

"I don't want you to think I'm too bold."

"I won't.

"I have a new car and I'm timid about driving it into New York at night. I won-

dered if tonight you and I could—I mean it would be nice to—"

"I'd love it, Linda!"

"At seven, then. No, make it six, so the evening will be long."

"At six, then," he said reverently. She left. Howard turned back to the cage and spoke tender words to the uncomprehending mice who flitted back and forth like rays of soft white light.

SAM arrived the next day, in the afternoon. He sought out Linda. He spoke a few words to her and later she came to his room. He shut the door.

"How did the kid react?"

"How did you expect?" she said bitterly. "He's nice, Sam. Too nice for what we're doing to him."

He held her shoulders. "Come on, now! Don't go soft on me. We've got to keep the kid in line and know he's going to stay in line before we do—the other thing."

"You're cold, Sam. You're cold and hard and cruel."

His hands tightened on her shoulders and his mouth curled. "Duckling, I was protecting your sensibilities. I used nice words. I could have said before we kill your father. I was being delicate."

Her eyes half closed. She swayed. "Sam, maybe I—can't—"

"I made you a promise in Acapulco, duckling. I told you that you'd follow through—all the way—or you'd never see me again. That still stands that way."

"Please, Sam."

"Don't forget we're married, duckling. We're gay newlyweds. Remember? I'm your staunch and loyal husband. Between us we'll own a hundred percent of this business. You said you wanted that."

"All right, Sam. All right," she said wearily. "I'll be all right—afterward."

"You better be. Now get out of here."

CHAPTER FIVE

The Iron Maiden

IT WAS a most unfortunate accident. Lieutenant Klatsa of the state police, who handled the investigation, saw how it had happened. The daughter—a nice item, that one, even with her tear-puffed eyes—told how Tomlinson had left the dinner table saying that he wanted to take a look at progress on the small addition to the main lab building. It was dusk, a fool time of day for an old duffer like that to be out climbing ladders.

The ladder had been tilted up against the cinderblock wall, with the legs in soft sand. It was clear how the ladder had shifted and slid. It came down with the old boy and he would have survived the fall had it not been for the cinderblock. The edge of it caught him at the temple.

The man named Banth was pretty up-

set about the whole thing. And odd set-up; the old man working with rabbits and cats and rats right on the same property where this Banth operated a health camp or something.

He made his report and the body was taken to a Kingston funeral home and buried two days later in a local cemetery, at a service attended by the weeping daughter, a grim-faced Sam Banth and the entire staff.

AFTER dark, as Howard was heading back to the dormitory, he passed Linda's car in the drive. He did not notice her siting in it. "Howard!" she called. He turned back and she said, "Get in, Howard. Sit beside me for a little while." He sensed the tears behind her words.

She began to sob softly as he got in. She leaned against his shoulder. A scalding tear fell on the back of his hand, and her helplessness turned his heart over and over.

"There, there," he said. He held her in his arms. He wished she would keep crying forever so that he could hold her.

At last she was under control. She sat up and moved away from him.

"What is it? Anything I can do, Linda?"

"I don't think so, Howard. There was a board meeting today. That horrible Mr. Prader and Mr. Banth and me. I thought things were going so well. I thought dad had left me a little money. But it doesn't look that way."

"What do you mean?"

"Mr. Prader says that we're over-extended. We expanded too fast. Notes have to be met. The only thing to do, they say, is disband the staff and close the labs."

"They can't do that!" Howard said hotly.

"But we can't afford to keep them up. No one man could handle the treatments, you know. I guess it's all over."

"But that's silly! I could handle them by myself. The big staff was for research."

"You could do it by yourself. Would you do that for me? I think we could keep on paying you the same amount."

"They should have had me in that meeting. What do they know about what Dr. Tomlinson was doing? In another three days I'll have the new equipment set up so that an idiot child could operate it. Dr. Tomlinson and I were working on making the outfit both portable and equipped with fool-proof controls. I don't know why he wanted it that way, but now maybe I understand."

"Oh, Howard! If you'll only stay there's a chance that the gamble will pay off. After all dad did, it seems a shame to give it all up."

"I thought Banth was making a good thing out of all this. I thought those athletes were bringing in a good return. I don't approve of what you people were using Tomlinson's discoveries for, but I thought that it was at least profitable. To me it has always seemed like monkeying with people's life spans, which could be a second cousin to murder. What's the matter? Did I say something wrong?"

"No. Go on."

"You keep giving athletes miraculous reaction times and they automatically become tops in each sport. It destroys the basic idea of competition. When the world knows, and some day it will, they'll either outlaw the 'graduates' of this place, or competitive sport will be dead."

"But in the meantime it's profitable, Howard. But not profitable enough. The return hasn't been big enough to cover the investment."

"That surprises me. It doesn't seem logical the way Banth tosses the coin around. But I guess that's none of my business. I'd do anything in the world to help you. Fire the rest of the research staff and I'll stay on and run the new

gismo once I get it hooked up. If you have to cut down even further, I could show you how to operate it in twenty minutes."

Her arms slipped around his neck and her lips were insistent. It was not the sort of tender kiss that he had expected. In some obscure way it disappointed him.

"Thank you, darling," she whispered.

SAM BANTH walked into the smallest lab building, the only one that was not closed when the rest of the staff departed. Howard looked up and nodded distantly.

"That the works?" Banth asked, pointing at the apparatus. It was a framework sarcophagus, an iron maiden formed of metal tubes, hinged to open and admit the patient. Affixed to the tubing at what appeared to be random points were cup-sized discs. The back of each disc was an exposed maze of wiring and tiny tubes.

"That's it," Dineen said absently.

"How does it work?"

"We don't know. Dr. Tomlinson abandoned his previous line of conjecture a few weeks before he died. If it was pure stimulation, the body structure could not withstand the increased speed. We were working on the theory that in some unknown way it put the individual out of phase with normal time. In other words it creates for each individual an entire universe of accelerated time in which he is the sole example."

"I don't mean *why* does it work, Dineen," Banth said. "I mean how do you make it work?"

"Here's the control box. You can see that the wiring passes through it before leading to the discs. Note that there are two dials, calibrated, on the slanted side of the box. You translate the subject's weight into kilograms and set the left-hand dial carefully. There's a mass problem involved. The right-hand dial works much the same way as a rheostat control. You can see that it is calibrated with a diminishing interval between markings. Those markings are in percentages. The dial must be turned slowly. It is geometric. The first centimeter gives you a ten per-cent acceleration, the next centimeter twenty. Then forty, eighty, one sixty, three twenty and so on. It goes so high because we used it on lab animals. For humans this little stop should be slid over so that there is no chance of the acceleration going beyond twenty per cent. Anything beyond that and the individual cannot be trained to simulate normalcy."

"Have you turned the dial over all the way on an animal?"

"Once. It was a bit—terrifying. We filled a cage with ample food for the lifetime of a mouse. The mouse disappeared for the smallest fraction of a second and then reappeared, quite dead on the bottom of the cage. Most of the food and the water was gone. We were able to tell that it had died of old age. There was a distinct malformation of the nostrils and lungs that had not been there before, showing that in the first part of its accelerated life span it had trouble sucking the air into its lungs with sufficient speed to maintain life. You see, it had to overcome the inertia of the air."

"Almost anybody could operate the thing the way it's set up, eh?"

Howard smiled. "If you're thinking of firing me, I'd advise against it. I'm committing a criminal act using this process on human beings, even with their consent. You don't know yet what the potential after-effects may be. I'm trying to find out. If you block me, I'll go directly to the authorities. You see, I'm the only person with the exception of Dr. Tomlinson among the research staff who knew what you've been doing here."

Banth pursed his lips. "That's pretty big talk. Feeling tough, eh?"

"No sir. Just practical. My salary is small. I think you'll see that it's best to

keep me around. I'll even be frank with you. If it weren't for Miss Tomlinson I would have quit six months ago when I first found out what was really happening here."

Banth looked back at the apparatus for a long moment. It looked absurdly like some skeletal robot.

"Keep working, Dineen," he said. "Any after-effects you can isolate will be helpful. I'll send two more boys around this afternoon. They're young enough so that ten per cent ought to do it."

WALLY CHRISTOPHER caught the signal and shifted left. He adjusted his sun glasses. He saw the pitch go down and the lusty swing. The ball was an upslanting streak. He gauged it and moved over, careful not to move too fast. It came down, ridiculously slow. He moved toward it, as slowly as he dared, then dived, gloved hand outstretched. The ball smacked into the pocket and stuck. He rolled over and over, hearing the full-throated roar of the crowd. In days gone by it would have given him a lift. Now it was just too easy. He jogged in toward the dugout and he realized with something close to fear that baseball just wasn't very much fun any more.

The girl across the net from Barbara Anson was playing with taut despair. They were into the second set after Barbara's 6-1 win in the first. It was four games to one, Barbara's favor and she had this game at deuce. Barbara's serve. She softened the serve and let the opponent return it. She forced herself to place her own return within easy reach of the younger woman's powerful forehand. Barbara made herself lose the return, smacking it into the net. She walked back to serve. It would have looked silly to win without giving up a single point in any game. Yet she knew she could do it. She had always loved the tense competition of the game. Now it was like playing with children, humoring them along, encouraging them. She wondered if she should give up the game—for good. The old thrill was gone. .

The seventeenth had always bothered him. Four hundred and sixty-five yards, par four. Before, it had been a case of getting the second wood close enough so that the approach could be played up to one-putt the green for a possible par. The only chance of a birdie was to sink the approach. Now he was alone on the hole in the graying dusk. He teed the ball, took a limbering swing and then addressed it. He swung with every ounce of effort and speed at his command, breaking his wrists at the right point for that final snap. Clubhead against ball made the deepest, heaviest crack he had ever heard on a golf course. The ball went out and it looked slow to him, but it rose, floating, fading. When at last he walked up to it he saw that he was not more than thirty yards from the edge of the green. He looked at it for a long time and then picked the ball up and trudged back in the direction of the clubhouse.

And all over the country, sports figures, doing at last, with ease, the things of which they had so long dreamed, became discontented. Now the ability was there, and yet it had been gained too easily, with too little effort. It was suspect, as are all gifts. Records were broken. The sportswriters talked about 'the new crop of immortals' and when they talked among each other they marveled at the comebacks that had been made. They speculated. They did not guess the answer. There were new champions. Bored champions. Wealthy, yawning champions. Restless and lonely. They were the new strangers in a strange land. There was no need to train, to practice. The only goal was to refrain from winning too flagrantly. There was no competition for them. And thus all the games became work.

SAM BANTH spent less and less time on the property and more time in the city. Linda's devotion bored him. He would not have said that he was in any way a moralist, and yet he was oddly troubled that Linda was so unaffected by the death of her father. She had planned it with him and had correctly given her testimony which made it all the more obvious that it had been an accident.

Sam felt no special guilt at having committed the crime with his own hands. It had been absurdly easy, once the plan had been made. And Tomlinson, at best, had very few years left to him. It was not like killing a young person—hardly, to Sam, like killing a person at all.

Yet there was something almost obscene about the placid and untroubled way that Linda treated it, as though it were an unfortunate incident.

When she was unattainable she had been an excitement to him. Now she cloyed and stated and smothered him.

Two factors entered into his planning. The apparatus was portable and could just as well be set up in New York. Without Linda the entire take would be his. He woke up often in the middle of the night thinking about those two factors. The puzzling additional factor was Howard Dineen. How would Dineen react if he and Linda made their marriage public? Linda wanted it made public. Sam had demurred with the reason that to do so would alienate Dineen. But now Linda knew how to run the apparatus. In fact, she had treated two "students" with almost no supervision from Dineen. She was growing more insistent in her demands.

From a practical point of view it would be wise to publicize their relationship before Linda met with an "accident." Then the marriage licence, reposing in his safe-deposit box, would not be in the least suspect. It would be accepted as a legitimate document, which it was.

But to alienate Dineen might mean his running to the newspapers with the full account. It might cut the throat of the golden goose. "Graduates" might be barred from competition.

He worried the problem around in his mind for several weeks. The golden flow of money from the "graduates" increased. Instead of sating his needs it merely seemed to increase his itch to gather in all of it, not forty-nine percent.

And at last he had his plan, and it pleased him. It depended on how trusting Linda was. He covered his motive by a confusing monologue on tax structure.

"If you say so, dear," Linda said. There was no suspicion in her now. She signed over her own stock and that which she had inherited from her father for the consideration of one dollar. The forms were

duly notarized and recorded. Prader wore a wise look. Sam made a private vow to unload Prader and take on a new accountant-attorney.

The next day he went to a cheap rooming house and paid in advance for a room. That night, at dinner, he said to Howard and Linda, "I've got a pretty special customer who doesn't want to be seen coming out here. It's a profitable deal. Maybe we could take the thing into town. You said you could make it run on a house circuit."

"It will take a few hours' work."

"Could you do that tonight? Then we can take it in in the morning."

"Okay with me." Dineen said.

Linda said just what Sam had hoped and expected. "Oh, can I come along?"

"If you want to, Linda. Sure." He smiled at her. Inside he was laughing.

THE furnished room was on East Ninety-third. It was dismal, with rug, walls, one overstuffed chair in varying shades of dirty brown. The two windows looked out onto an airshaft. No sun ever reached it. The low-wattage bulbs had to be kept on at all times.

"Charming setup." Linda said.

Sam carried the iron maiden over by the table He unwrapped the blankets from around it. Howard busied himself with the connections. Sam sat on the bed and smoked until at last Howard sighed and backed away "All set."

"When will this Important Person be along?" Linda asked.

"Any minute now."

He put his hand in his pocket and, as he stepped close to Howard Dineen, he pulled out a worn leather sap. Back in hungrier days he had taken it away from a recalcitrant bookie customer. He planted the lead weight delicately behind Howard Dineen's ear. Dineen sagged and fell.

Linda stood, her mouth open, her eyes wide. Horror and realization replaced surprise as Sam swung at her. The lead struck the corner of her jaw. He caught her as she fell.

It was awkward getting her inside the tubular iron maiden. He shut the hinged front of it and she slumped down inside it until her knees struck the front and she remained partially propped up. He pulled the control box toward him, set it at an approximation of her weight and twisted the other dial. As he did so he leaned against the front of the case to keep her from bursting it open. She began to move around inside so rapidly that she was blurred. He could not focus on her. If Dineen had not been lying it should take only a few moments before she became still, dead of thirst. At times he could see her and he guessed that she slept. When he was certain she was dead he would haul her out and put Dineen in there. It would be a mystery the police would never solve. Two people dead of thirst after a dozen witnesses had seen them alive earlier the same day.

He was totally unprepared for Dineen's heavy step behind him, for the smashing blow against his jaw that drove him down into blackness.

CHAPTER SIX

The Endless Twilight

HE STIRRED and shook his head. He was looking out through the tubing at Howard Dineen. Dineen stood like a man carved of stone, thumb and forefinger on the right-hand dial. Tears seemed to be frozen on his face.

In panic Sam Banth pushed against the front of the iron maiden. He could barely lift his arm. It was as though he were imbeded in sticky oil. His arm seemed to take interminable seconds to reach the tubing. He pushed hard and nothing happened. He leaned his whole weight against it. He could look down and see that it

wasn't latched, that the hinges seemed free. He pushed mightily, panting with the effort. It was enormously difficult to breathe. The air felt like a solid substance. Yet when he tried to breathe the hardest, the air seemed to scorch his lips and nostrils.

He pushed again and saw a tiny gap. No matter how hard he thrust he could not hasten the speed of its opening. Howard stood there, completely motionless. No man could stand like that for so long. Sam wondered if he were dead. There was no question about Linda's being dead. He could see her on the floor. Her body was shrunken and cracked, swollen lips protuded. Her eyes were sunk back into her head.

Time after time he was forced to stop and rest. He had no idea how many hours passed before the door was opened wide enough for him to squirm through. The room was changeless and eternal. He tried to move toward the door, but it was a prolonged struggle to take each step. He tried harder and saw that both pants legs had split completely down the front. It was then that he realized the constriction of his clothes.

When he pulled at his clothes the material came apart, with agonizing slowness, in his hands. Hunger and thirst began to torture him. He knew that he had been in that room for the passing of an entire day and a night. He began to grow weak. The shoes were the last. And finally he stood naked; he could move once more. He went to the door with quick steps and found that he couldn't turn the knob. He gave a fearful look at Howard Dineen. During the past hours the position of his head had changed a bit. Sam went into the small bathroom. The window was open. He eeled through, knowing that public nakedness was preferable to the sure and certain charge of murder should he be captured in the room. He dropped twelve feet to the alley level, falling with a lightness that surprised him, as though something had cushioned his drop through the air.

He trotted cautiously down the alley with a half-made plan to grab someone and strip him of clothing. He came out and peered cautiously at the street. At that moment he realized, for the first time, the complete and utter soundlessness of the city. Pedestrian's feet were frozen in mid-stride. All traffic was halted. An absurd pigeon hung motionless in the air. Across the street a woman had tripped. She was falling forward, her hands outstretched, a startled look on her face. Sam looked at her narrowly. He could detect no movement.

The fear of pursuit, of being captured and convicted of murder, faded and died in the face of this newer, greater fear. His sensations, except for the breathing difficulty and an odd heat against his body when he moved quickly, seemed normal to him. Yet the world had changed in some grotesque way. Howard Dineen had turned the dial. . . .

Sam Banth was not an emotional man. He forced himself to stand very still despite thirst and hunger and weakness. He would have to weigh his own situation from the point of view of the outside normal world. If he could detect no movement then undoubtedly his own movements would be too fast to be detected by the naked eye.

He puzzled over the problem of the clothes. Evidently it had been inertia. He was capable of moving at a vastly greater speed than the clothes could be moved. Thus they would split and, while clinging, hinder every movement. And that explained why he could not force the door of the iron maiden open except with an agonizing slowness.

He looked back at the falling woman. He narrowed his eyes. Her angle of inclination seemed subtly different. The city was soundless, a vast tomb. The thing

was to find something he could measure, some way he could find out just how far he had been speeded up, just how far he was out of phase. A falling woman seemed an inadequate yardstick. He stepped onto the sidewalk. No eye turned toward him. He realized how fortunate he was that it happened to be a warm day. A man was poised a few feet away, frozen in the process of taking a step. Sam walked up to him and hit him in the stomach with all his strength. It was like hitting marble. The painful shock ran up his arm. The inertia of the flesh prevented it from giving under the force of the blow. Yet Sam knew how terrible that blow had been. He went behind the man, bent and wedged his finger between the angle of shoe sole and sidewalk. In several long minutes he sensed that the pressure was increasing. Yes, the man was being driven backward by the force of the blow. It seemed likely that he would eventually end up a dozen feet from the point where he had been struck. Sam went around and looked into the man's open eyes. There was a subtle change in the expression. He knew that the man was dead where he stood.

Suddenly Sam Banth had a wild sense of power. He turned and touched the bare arm of a girl. It was warm, yet marble-hard. He kissed her lips. They were like sun-warmed stone. He laughed wildly in the silent city and his voice soared shrill in the stone canyon and was gone.

He remembered his hunger. And with it came caution. If hours passed for him at the rate of seconds for the rest of the world, then it would be wise not to be trapped in any closed place. He trotted down the sidewalk to Park Avenue and turned south. In the second block he found a cafeteria with the door wedged open because of the heat of the day. Two men were emerging, fixed in stasis, one grinning back over his shoulder at the other. Just inside a fat woman was reaching for the punch slip. Sam ducked under her extended arm. Thirst was the most pressing need. A girl was filling a water glass from the fountain. The stream of water looked like ice. A few drops that had spattered were perfect spheres hanging in the air.

There were long moments of panic until he found a way that he could drink. It had to be done in precisely one way, and no other. He had to turn so that he was looking straight up and then force his cheek against the still column of water. By exerting a long steady pressure he could move his head through the column. Then, with the end of the broken column directly above his mouth he pushed upward, thrusting the column down to the back of his throat. He bit a length off and it was like biting through a stick of rubbery taffy. He swallowed, gagging at its solidity, but feeling it change in his throat to the fluid he needed so badly. He went to four other fountains and did the same. It seemed to him that an hour passed before his thirst was partially satisfied.

Eating was a simpler problem. At first the method gave him a moment of nausea. There were at least a hundred persons eating. The process was to find forks that were raised halfway to lips. He could fold his mouth over the food and taking what seemed to be a full three minutes in each case, pull it away from the fork. It came reluctantly as though it were frozen to the fork and his action melted it slowly. He found that attempting to chew the food was too prolonged a process, and thus he was forced to find those morsels that he could swallow whole.

It seemed to take hours. When he left he saw that the man who had been smiling over his shoulder had turned his head a full inch. The fat woman had pulled the slip almost free of the machine.

He was enormously weary, his body starved for sleep. Weariness drugged him so that he staggered as he walked. He

found an alley, a small dim corner near a barred window. He curled up like a dog and went to sleep.

SAM BANTH awakened with a great start. He jumped to his feet, knowing at once where he was, remembering what had happened. He was hungry. He went furtively to the alley mouth and saw the sunlit street still in its frozen state. He trotted back to the cafeteria.

He stopped suddenly and sobbed aloud. The two men were still emerging. The man in front had turned his head so that he faced straight ahead and he had taken one more step. The fat woman was another step closer to the pile of trays and the slip was free of the machine.

Panting to suck the solid air into his lungs, he walked rapidly back to the street he had first seen. The pigeon had moved a full thirty feet and, feet outstretched, it was frozen in the act of landing on the pavement. The man he had struck had taken two steps backwards. His eyes bulged and his mouth was open and he had lifted his arms.

Sam walked back to the cafeteria. The streams of water that he had bitten off had replaced themselves and the same persons stood filling the water glasses. The forks he had emptied seemed not to have moved and he realized that they had been carried up to the lips and were now on the return journey to the plates.

He spent long hours satisfying thirst and hunger, and then he was face to face with the problem of finding some measuring stick to compare his time with outside time. He walked all the way down to Fortieth Street, seeking some method he could use. No motion was perceptible to his naked eye. He leaned in at the window of a cab and saw that according to the speedometer it was traveling at twenty-four miles an hour. He figured out that, in outside time, it would go thirty-five feet a second. He found that the left rear wheel was resting directly on a small crack in the asphalt. For a moment he thought he had a method of computation and then he realized that he had no certain way of keeping track of his own time. He could go only by "sleep times." He memorized the license plate of the cab.

After he slept again, this time in the back seat of the empty cab after worming his way in at the open window, he climbed out and paced off the distance that had been traveled. He estimated it at thirty feet. He looked at the speedometer again. The cab was traveling twenty-eight miles an hour now. The variables had defeated him.

But after he ate another idea came to him. He found a penny arcade on Seventh. A young boy had a .22 rifle at his shoulder, the trigger depressed. Sam climbed over the counter and searched down the line of fire until he found the tiny slug,

Doubting Thomas Now Convinced

Thomas W. Mutch, Boston, has now switched to Calvert because it tastes better.

CALVERT RESERVE BLENDED WHISKEY—86.8 PROOF—65% GRAIN NEUTRAL SPIRITS. CALVERT DISTILLERS CORP., NEW YORK CITY

suspended in midair. He knew from the loads on the counter that the boy was firing a .22 short. The slug was a dozen feet from the muzzle and he estimated that it was traveling at a thousand feet per second according to outside time.

The most precious thing about it was that he could see the slug move. He could touch it very lightly with his finger and feel it move. He lined it up with an object on the side wall, shut his eyes and counted off a minute—"one thousand one, one thousand two, one thousand three, one thousand four. ." He opened his eyes. The little lead pellet had moved what appeared to be a good two feet. He measured it more carefully. Less than two feet. He rechecked, using longer intervals. For a little time it ceased to be such an intensely personal matter and became an abstract problem.

He said, aloud, with satisfaction, "Close enough. One second outside time equals ten hours subjective time." He carried it further. "Let me see. Five of my minutes equal one hundred twentieth of a second for Them. Conversely, thirty-six hundred seconds in an hour, eighty-six thousand, four hundred seconds in a twenty-four hour day, multiplied by ten to give the number of subjective hours—divided by twenty-four is thirty-six thousand days, or—"

He fell to his knees as the full import struck him. He beat his thighs with his fists. He shouted at the deathly stillness of the city and at the frozen people. He ran through the streets then, cursing them and the motionless sun and the unseeing, unknowing faces.

THOSE were the early years. The sunlit years, the years when his beard grew full and tangled and his belly was gaunt and his legs knotted and stringy from trotting through the city.

As he grew more adept at eating it took up less of his time, and he estimated that he cut it down to half his waking hours. He learned craft. If he saw someone in the act of pushing a door open, a heavy door, he knew that before the door swung shut again he could spend long hours inside the building. It became a dangerous game.

Once he barely slid through in time and he was afraid, because if ten objective seconds passed before the door was opened again, it would be one hundred hours for him. Thus he learned caution.

He got a childlike pleasure from the department stores.

He roamed all over the city. In the city were many women. He saw the fresh young faces, the skirts sculptured and frozen by the breeze, the legs striding. He found them in the dressing rooms of the department stores, on the rubbing tables, in the beauty salons, and their flesh was to him like the stone of a garden bench in the sun. He found one girl warm-eyed, smiling into the face of her beloved, and he returned to that girl many times to put his face in the line of her vision and imagine that she smiled at him rather than at the stone man behind him. But he tired of that.

Several years later, it seemed, he found himself in a neighborhood that looked vaguely familiar. A shattered man lay on the sidewalk, crumpled in death and the blood around him was like a dark red mirror. It took a long time to remember. He seemed to remember having struck that man a long time ago, and yet he did not know why. People stood around the fallen man, with horror fixed on their faces.

Once he heard a deep sustained sound. It took four "sleep times" before he found it. It was a subway train. A woman had fallen on the tracks in front of it. Frozen sparks fanned out from the steel wheels and from those wheels that the sound came. He listened to it with pleasure for a long time. He went back many days until the sound died away.

He discovered that if he went to enough bars he could find hard brown streams of liquor that could be bitten off. On those day he went singing through the streets, smiling and nodding at the thousands of statues.

For many years he slept in one of the department stores, one that had a door blocked open. The bed he found was like stone but he discovered that after what seemed like an hour or two of sleep he sank into it, into a hollow that made sleep more comfortable. Once, when he was very tired, he slept in that bed for a very long time.

He awakened and sat up to see a woman who had been looking toward the bed when he had climbed in. Her expression had changed to one of incredulous surprise. He knew that if he had slept for ten subjective hours, she would have had a whole second to see him there. It would look to her as though he had appeared by magic. This pleased him. He ate and returned to the bed. He lay very still and watched her. Over the long hours her face slowly turned brick red. Then he tired of the game.

But it gave rise to other experiments. He found a fire escape and climbed it one day to find a woman sunbathing on the flat roof. He lay beside her and went to sleep, directly within her line of vision. When he awakened, her mouth was wide in a scream he could not hear. He did not know how many days passed before he thought of her again. He went up and found her, eyes bulging, towels left behind, frozen in the act of running toward the small penthouse.

The dark years came. The sun faded slowly over a period of many sleeps and he saw the cloud that crept across it. It was during those years that he ceased his wandering. He went only as far as was necessary to find food that could be obtained without the danger of being trapped. He slept, when he was weary, on a pile of rags in a protected corner of an alley. He talked a great deal to himself. He measured the time of sleep by the people who walked by the alley mouth. One step, a step and a half, sometimes two steps.

The world slowly darkened. Each time he awoke more lights would be on. For weeks they came on, for months.

He was constantly cold and yet he had discovered that many of the doors, once open, were closing, and he dared not sleep inside.

Once he awoke in the darkness and he remembered that he had dreamed. He had dreamed of a girl and people who moved as he moved, and a shining network of tubes and a place a long way off.

OPINIONS, PLEASE

When you've finished this issue of SUPER SCIENCE STORIES, won't you let us know what you thought of each story? Please number the items in the order of your preference. Use this coupon, or write us a letter or postcard if you prefer.

Half-Past Eternity .....
King of the Stars .....
Last Return .....
Vengeance, Unlimited .....
Escape to Fear .....
The Metal Smile .....
A Bit of Forever .....
The Ancient Ones .....
To the End of Time .....

Address:
The Editor
Super Science Stories
205 E. 42nd St.
New York 17, N. Y.

He had to go to that place. He was feeble and he walked slowly. But he knew he would reach it.

THE DISTRICT man was Lieutenant Mareno. He folded his hands on top of the desk with exaggerated patience. "Dineen," he said, "if it takes a year, you're going to give me a story I can get through my thick head. Now try it again."

Howard said angrily, "You could understand it if you'd just concede one point, lieutenant. I smashed the apparatus because I hated it, because it had killed Linda. Or rather Sam Banth killed her. But when the thing was working it made time go very quickly for the person inside it. Sam Banth was using it to decrease the reaction time of athletes, professional athletes. You've heard of Wally Christopher, I imagine."

"Who hasn't? Four eighty-three batting average."

"He couldn't hit until we treated him. We used a different method on him but it amounts to the same thing. Banth collects fifty percent of his gross. You grab him and he'll help prove what I'm trying to say. Now try to understand. From something Linda said I think Banth got her to sign over her stock in Champions, Incorporated, to him. He took us to that room to kill us by putting us in that apparatus and making time go very quickly for us. When we were dead he was going to leave with the apparatus, I'm sure. The police would find two people dead of thirst and starvation."

"I want to know how."

"Look, lieutenant. What if you were locked in this office for ten days?"

"I'd die, naturally."

"Then suppose I could fix you so that while you were living ten days, the rest of the world was living two or three minutes. It would only take you two or three minutes to die, wouldn't it?"

Manero scratched his gray head. "I don't quite figure it."

"Then, dammit, how come Miss Tomlinson is dead of what your own medical examiner calls dehydration? And how come we both can prove she was in perfect health at nine o'clock this morning, twelve hours ago? Answer it some other way, lieutenant. I wouldn't be wearing this bandage if I hadn't been slugged by Banth, would I?"

"Look, Dineen. My job is to turn enough over to the prosecuting attorney so he can make a case. What the hell!"

"Banth killed her."

"Look. Could you rig up some kind of gadget and come into court, provided we catch Banth, and prove maybe with an animal how it works? The S.P.C.A. will crucify us, but I don't see any other way."

"I could do that."

"Okay. Now what happened to Banth? What did he do after you slugged him and took Miss Tomlinson's body out of that machinery?"

Howard looked away for a moment. He said easily, "I hit Banth and he fell. I took Miss Tomlinson's body out. I was examining her and then I found that she was dead. I looked around the room and I saw that Banth had escaped from me."

"I don't see where the hell he went," Mareno said. "He's an easy guy to spot. We'll pick him up sooner or later. What a hell of a day this has been for the department!"

"How so?"

"A guy is killed thirty feet from the place where the Tomlinson girl was killed. Nobody knows what killed him. Something hit him and broke him almost into two pieces. The whole town goes crazy all at once. We get calls that a cafeteria is serving disappearing food. Can you tie that?"

Howard Dineen wore an odd expression. "It sounds strange."

"And that ain't half of it, brother.

Hysterical women phoning in about seeing ghosts in the daytime. They call in from all over the city and always it's the same ghost, an old nekkid guy with a bushy beard that appears suddenly and then disappears just as they yell. We combed a department store for him where three people seen him. No dice. Two bars or maybe it was three phone in that somebody is stealing liquor. Sergeant Rausch, a friend of mine covers one case. The bartender shows him. He pours liquor into a shot glass. He pours out half the bottle before he can fill the glass. Rausch is quitting the force. Then we got maybe fifty, sixty cases of people all banged up, nobody knowing what hits 'em. Busted arms, shoulders, legs, heads, backs. Two dead already and maybe two more going to be. A hell of a day. The witnesses say these people were walking along and all of a sudden they take a big dive onto the sidewalk or out onto the street."

The phone rang. Mareno picked it up. He listened, replied in monosyllables and then hung up. He wiped one big hand slowly down his face.

"I quit," he said weakly. "I resign."

"What now?"

"They got a call to go back to that same address. Where you were. There is an old naked guy there with a white bushy beard and hair halfway to his waist. He was on the steps and nobody knows how he got there. The ambulance boys say he died of old age and pneumonia. It isn't the ghost those women saw because they said the naked guy had a dark beard. I was sworn in by Valentine and he never told me there'd be days like this."

Howard stood up. "Would it be all right if I left now?"

"It will suit me fine. Don't plan on moving away or joining the army, though." Mareno looked up suddenly. "Say, would you know anything about that old guy—no, that's a silly question. We'll be in touch with you. When we locate Banth you'll have some work to do for us.

Howard Dineen walked out into the night city. The cool breeze that had come with the fading day chilled the perspiration on his forehead and upper lip. Around him was the sound of traffic, fragments of sentences, subterranean roar of the trains.

Above him the timeless stars moved in infinite orbits.

ON THE NEWSSTANDS

Earth's Last Citadel

By C. L. Moore and Henry Kuttner

At the dying Earth's flaming Source of Power, Alan Drake pitted puny human strength against the all-consuming Alien's irresistible might—in lost mankind's last struggle for survival.

A strange novel of cosmic dark magic which you will not want to miss. . . In the big July issue, on sale at all newsstands now.

25¢ FANTASTIC Novels

They set their fuse to that frozen world, and quickly departed.

KING of the STARS

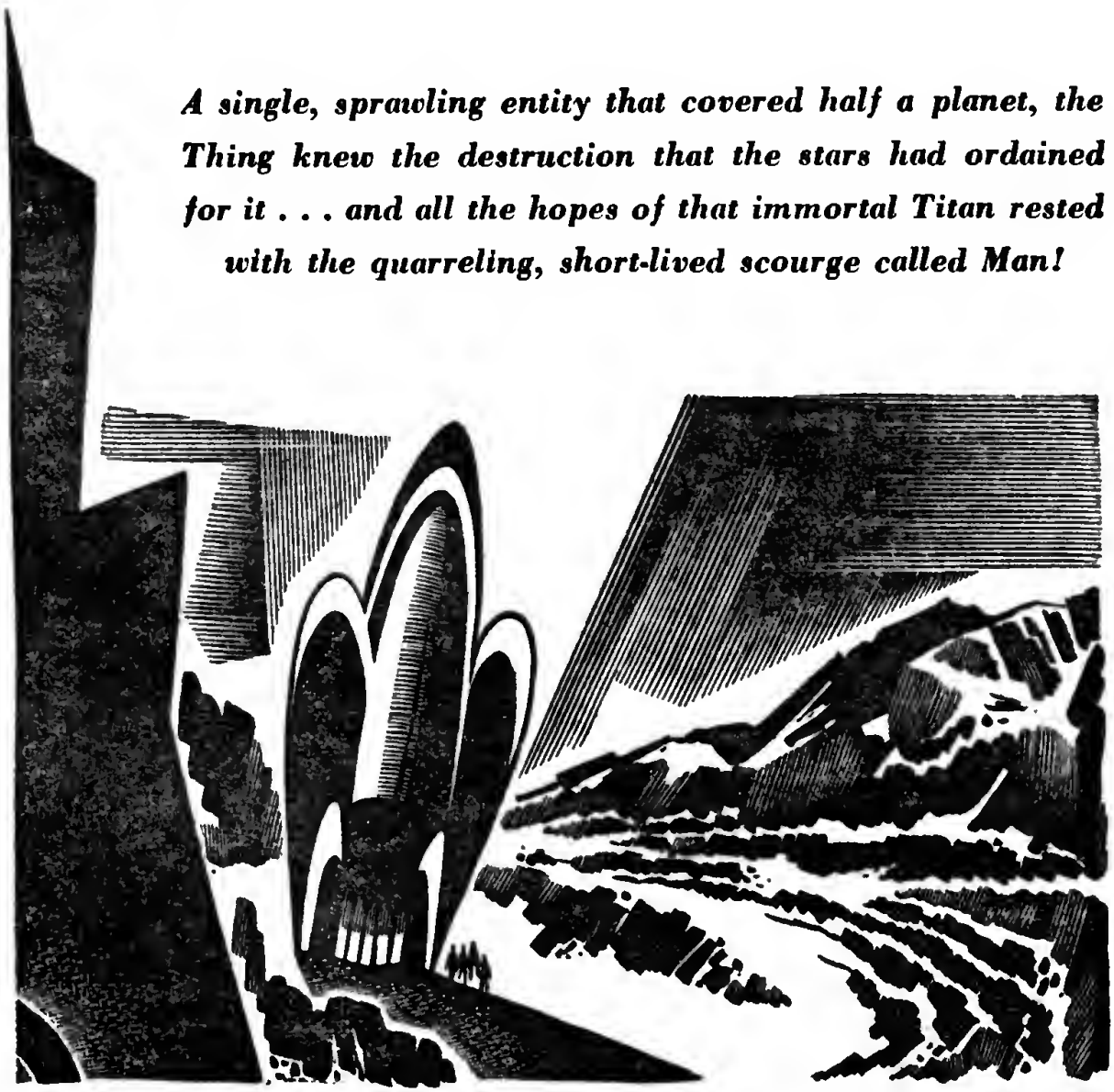
By WILLIAM L. BADE

EXTINCTION—that was a new concept.

The Thing did not remember its own origins. Memory requires a high degree of organized complexity, and advanced structures must evolve out of simple ones. Far, far back, there had been an interminable period of unaware existence, and before that, presumably, a beginning—perhaps a random combination of minerals and natural metals at the marge of an ammonia lake.

Its unit network—cells—had at first drawn their energies and substance from the chemical environment. They had multiplied; the Thing had ex-

A single, sprawling entity that covered half a planet, the Thing knew the destruction that the stars had ordained for it . . . and all the hopes of that immortal Titan rested with the quarreling, short-lived scourge called Man!



tended itself, aeon after aeon, until it embraced almost half the giant planet's surface.

Ten to the twentieth power—that was the number of its cells. Extrapolate from paramecium through man one step further; the Thing was that complex.

And it was slow—everything about it was slow. Its growth, its development, its very thinking proceeded on a time scale in which ten thousand years made a moment. It was asleep, dreaming long gentle dreams of ammonia rain and methane winds, contentedly discharging ripples of electrical potential through itself. Only a long-continued, intense sense of discomfort could break it from that slumber and rouse it to a degree of self-awareness.

Its first awakening came when its oldest portions began to decay because of exhaustion of local chemical substances necessary to their functioning. Reluctantly, the Thing stirred and began to search for new sources of energy. The numbing agony of dying networks drove it to a frenzy in which it improvised crazily on its own structure—and in only ten million years found a way of employing the light that filtered down through the deep atmosphere to maintain, repair, and extend itself.

Thus was its attention drawn to the region above the ocean of gases that enveloped the planet. Slipping back into the dream, it continued, less frantically, to improvise; in another geological epoch it developed sensitivity to mass, and so discovered the planet's moons and the other, more distant, bodies of the solar system. Later, refining the new sense, it learned to perceive the wavelike patterns which comprised the fine structure of all matter. Over hundreds of millions of years it learned to observe many aspects of the universe. One of the new spectra of energies it discovered enabled it to detect the presence of protoplasmic life on the hot worlds which were nearest the sun.

Able to perceive the motions of the planets in their epicycles, it learned, because it could now measure, the passage of time. Automatically, over the course of an age, it perceived that these bodies moved: *so*. Automatically, it extrapolated these motions and witnessed without surprise the fulfillment of its expectations. And it extrapolated still further

And foresaw the event that meant: extinction.

It slept on. There was no memory in it of any beginning; it could not evaluate the prospect of nonexistence. For millions of years, it continued to dream—and the dream became a nightmare in which its networks repeatedly integrated and reintegrated the motion of the huge stone that was going to smash it and put a period to its being. As the remaining time inexorably approached zero as a limit, a state of shock developed; the ripples of potential which were its customary expression of well-being became waves of high voltage sweeping through its disturbed circuits. An impulse towards some sort of self-defensive action built up—and there was nothing the Thing could do.

It discovered the concept *extinction*, and for the first time saw itself as separate from the universe. *It* was going to cease being—everything else would go on. That terrible new sense of mortality brought a tension thousands of times greater than the Thing had ever experienced.

It woke.

THE PLANETARY clock that measured its existence was running down. It searched through all its memories of the events of a billion years, and found no solution. It began tracing the distant possibilities inherent in every class of phenomena its senses could detect.

Finally, it conceived a plan that offered at least a chance of survival.

The problem was, in essence, one of mobility. The Thing was involved irremovably in the very material of the planet's surface. It could not—directly—take any action to avert its own destruction. What it needed was a tool—a highly mobile tool capable of performing a certain large work of destruction. Examining the solar system by means of its various senses, it found a suitable material, from which such a tool might be constructed.

Protoplasm.

It began, in desperate haste, to make necessary additions to its own structure.

The life-form which it selected as raw material was on one of the hot little planets near the sun. The Thing began to exert its influence, guiding the development of the species. It was able to deal directly with the spectrum of energies involved in the functioning of protoplasmic nervous systems; at interplanetary distances it could exert only minute forces —but those were sufficient.

For the Thing could as readily fathom the behavior of those creatures as it could trace, and extrapolate, the motions of the planets. In the totality of its understanding, it was capable of producing great effects from very slight causes. A given result does not follow from one casual factor, but from a multitude—and the Thing was itself sufficiently complex to see each factor in relation to the whole process of which it was a part.

It could not *force* those creatures to do anything; but it could arrange a series of minor emotional impressions which ensured that at the crucial moment they would, quite naturally, do what it had planned. Its tampering was indetectable; it worked with energies near the uncertainty threshold, in the region where chance appears to play a large role.

A hundred thousand years before Newton, it effected an alteration in the human visual system and planted, thereby, the first seeds of the infinitesimal calculus. Man's development was shaped before history began, in the way he learned to see processes as the interaction of separate, static elements—in the structure of his first languages. Politics, war, the contingent happenings that pertain to the rise and fall of empires—these were the inessentials. Millenia before Menes, the counting-pot presaged wave mechanics.

The process was slow at first because the Thing had to learn how to handle its material—and because the material was slow to develop in the beginning. The deadline that divided extinction from eternity rushed closer. Fifty thousand years elapsed while it arranged a period when man would be sufficiently informed and maladjusted to develop a material science adequate to its needs.

At last the stage was set—for the final act.

THE time came when the tool must be apprised of its task.

"What took so long?" Walvoord asked. The irritation in his voice reflected thirty hours without sleep and a tension that had been building up ever since he had made the discovery. His eyeballs were netted with red veins, and the flesh beneath was puffy.

Brandell, the mathematician, stared at him across the paper-littered desk. His expression did not change, but a tiny muscle at the corner of his right eye began twitching. After several seconds Walvoord flushed and sat down. "Sorry." He chewed his lower lip.

Brandell leaned back in his swivel chair and lit a cigarette. He selected a paper from the desk and surveyed it with weary eyes, then stared at the astronomer for several seconds.

"How certain are you," he asked, "of your observations?"

"My ob— What's the matter with them?" He leaned forward and gripped

the edge of the desk, glowering, then wilted before Brandell's gaze and drew himself together.

"As I told you yesterday, I found the thing by accident. I was looking for photographic binaries, and I noticed this object that had moved considerably during the twenty-year interval. I found it on other plates. When I took the measurements I double-checked. I'll swear by them to the limits of accuracy I indicated."

Brandell sucked on the cigarette. "All right," he said. "If you're certain . . The first time I got this—" he waved the sheet gently—"this nonsense, I decided that one of us had made a mistake. Out of respect for your—competence—as an observer, I supposed that the fault was mine." He gestured deprecatingly with the cigarette. "After all, there were complications. The observations were separated by unusually long intervals

"I did all the work over. I got the same results."

"What—?" Walvoord pulled out a stained handkerchief and mopped his face. "What's the matter?" He reached across the desk and took the sheet of paper from the other's hand, scanned it with a puzzled frown, then slumped in his chair.

"Then it's *not* a planet? But—"

"Notice the distance."

"Distance. Oh—"

"Over two hundred and eighty A.U. That far away . . ."

". . nothing smaller than a planet would be visible," the astronomer finished for him. He frowned and chewed his lip. "It doesn't seem possible."

"You're still certain of your observations?"

Walvoord raised his eyes and took a deep breath. "I'll check them—we'll check them together. And we'll find other plates to corroborate the ones I have. But—the data I gave you were *right.*"

Brandell seemed to be peering into infinity. The twitch at the corner of his eye started again. "A cometary orbit," he said. "Aphelion at twenty-nine billion miles, perihelion inside the orbit of Jupiter . And it can't be anything but a planet . . . "

He ground his cigarette out on the rim of an ashtray that was already full to the point of overflow, and stood up. He came around the desk and Walvoord rose. The mathematician held out his hand.

"Congratulations," he said; his smile was peculiarly lopsided.

PLANET CRASH POSSIBLE, SAYS DISCOVERER

Berkeley, Calif., Oct. 28 (AP)—In an interview today, Dr. D. M. Walvoord admitted the possibility of a collision between the planet Jupiter and "Trans-Pluto," the new planet he discovered last May. He and the mathematician J. J. Brandell have been engaged since then in studying photographic plates taken of the region of the sky in which the planet appears, and in calculating an exact orbit for the new body.

"On the basis of reasonable assumptions concerning the albedo [efficiency with which the surface of the planet reflects light]," Dr. Walvoord said, "we estimate that it must be some twenty-five thousand miles in diameter. That would make it roughly three times the size of the Earth. We cannot establish the mass of the planet until we discover one of its moons, if it has any."

The new orbit calculated by the two scientists shows that "Trans-Pluto," as the body is being called pending the adoption of an official name, has a "year" of one thousand nine hundred and sixty-five Earth years—that is, the planet makes a complete circuit around the sun every nineteen and a half centuries. The last perihelion passage [passage through the inner solar system] was in 530 A.D., or perhaps a year earlier or later. The next perihelion passage is expected to occur about 2495 A.D.

"The usual form of the planet's orbit has occasioned much comment," Dr. Walvoord remarked. "All planets travel around the sun along elliptical paths, which as a general rule are nearly circular. The greatest previously-known exception to this rule was in the case of Pluto, which is sometimes the ninth planet as at present, and sometimes the eighth, because of the eccentricity of its orbit.

"The orbit of 'Trans-Pluto' is unique in this respect. Its path more nearly resembles those of the comets than that of any other planet. The orbit is extremely elongated, the greatest distance of the planet from the

sun being 28.7 billion miles, the least 479 million miles.

"Thus 'Trans-Pluto' is sometimes, as at present, the tenth planet in distance from the sun, sometimes the fifth. In oscillating between these extremes, it does not intersect the orbits of Saturn, Uranus, Neptune, and Pluto, but passes 'above' and 'below' them, because of the high inclination, seventy-one degrees, of its orbit to the plane of the solar system. Consequently, there is no possibility of its colliding with any of these planets or, as some irresponsible persons have suggested, with the Earth.

"Preliminary calculations of the effects which previous perturbations may have had on the orbit indicate that in earlier ages 'Trans-Pluto' passed, at perihelion [closest approach to the sun], between the orbits of Mars and Jupiter. These perturbations have had the effect of increasing the perihelion distance, so that now the orbits of 'Trans-Pluto' and Jupiter nearly intersect at one point. Calculations show that at the next perihelion passage, there will be a close encounter between the two planets. The accuracy with which we know the elements of the orbit of 'Trans-Pluto' does not allow us to predict whether there will be an actual physical collision between the planets, but certainly a large alteration in the orbit of 'Trans-Pluto' is to be expected.

"As to what effects this may have on the Earth, we are not able at present to make any definitive statement. However, in the event that an actual collision should occur, it appears that fragments of the bodies might conceivably follow orbits such that, at a later date, they would fall on this world."

He added, "Inasmuch as this event is only a possibility which cannot as yet be evaluated, we see no immediate cause for alarm whatsoever."

THE TOOL must be outfitted with the means of accomplishing the task for which it was designed.

Dr. Heidemann looked sick. His face, ordinarily cheerfully boyish despite his forty-seven years and the hard mental discipline of physics, was slate gray. Slumped in the chair behind his desk, he did not look capable of standing.

Outside the physics building, the shouts of the newsboys were scarcely audible above the roar of the students who were mobbing them for papers. But one raucously yelled word still penetrated into the office.

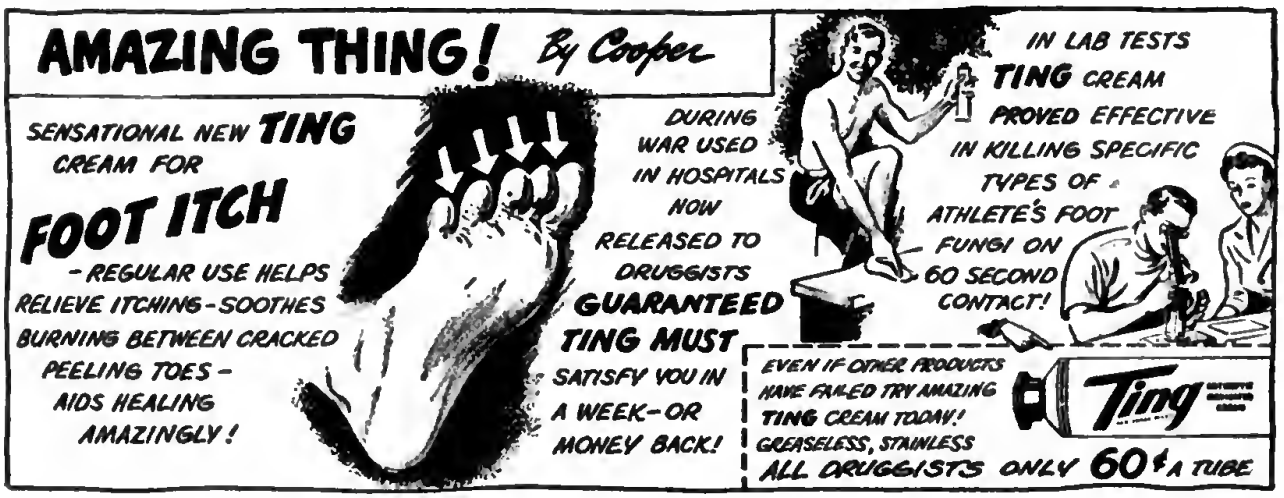
"War! War! Real a——it!"

Heidemann clenched his fists and ground them into his forehead, shuddered, and bent his body over the edge of the desk as he started to sob.

Several minutes later, when he sat up again, a copy of the *American Journal of Physics* had a large wet spot on its cover. He looked angrily out the window at the spring trees and the clamoring students and the blue evening sky, then pulled out a handkerchief and wiped his eyes and face. Standing up and breathing deeply for a moment, he threw an apologetic glance towards the color photo of Einstein's tired, peaceful face, then strode out into the hall.

In a room at the back of the building, the other department faculty members and the graduate students were gathered around a radio. The announcer sounded slightly hysterical:

" . . loss of Washington and New York City. As yet no one has officially taken



over the authority of the government. In the meantime

"Here's another bulletin: BBC, London, reports that extensive bombing attacks were made during the night on American Air Force installations in Germany. How much damage was done is—" His voice cracked. *"—is not known."*

After a short pause, another announcer came on. *"Here's a brief review of the events which have plunged the world into war today. At midnight, Central European time, enemy troops began a full-scale invasion of Western Europe, along a line stretching from the Baltic Sea to the Adriatic. Simultaneously, heavy bombing attacks were made on our air-bases in Germany and atomic missiles were launched, apparently from submarines, at Washington and New York City. The American public's first intimation of the attack came at 5:11 this afternoon, Eastern Standard time, when the network radio and television broadcasts originating in New York went off the air. Associated Press reports from Chicago, Philadelphia, and "*

Professor Stribling twisted the dial.

along with Pearl Harbor " "

global bombers, armed with the

Click!

"What's the use?" Stribling said. "There's nothing new. It's all the same story." He lit a cigarette and nodded greeting to Heidemann, who was standing in the doorway.

They glanced at him, and a hush fell over the room as they saw his face. One of the graduate students stood up to offer him a chair, but he waved it aside. He seemed to be looking at something outside the window about a million parsecs away, and when he spoke it was not to anyone in the room.

"After they dropped the bomb on Hiroshima," he said, "I swore I'd never work for them again." For half a minute, then, he stood without speaking.

"If it goes on, they'll destroy everything; they'll poison the earth and the seas and the air until nothing can live. They're too stupid to know there's got to be a stopping-point." He stopped again.

"It has to end quickly, this time. Otherwise—everything—" He swayed. "—will be ended.

"This time—half the world is fighting the other half. Maybe—if one side wins quickly—there will be something left. And—if one side wins decisively—there will be a single government for what is left."

He mopped his brow and stood up straighter. "This is a hellish business," he said slowly "but—I'm going to work on weapons again."

He licked his lips, turned and left. They could hear his slow steps receding down the hall.

IT WAS decided. They could not stop now.

There had not been so many important scientists in such a cold sweat since Alamogordo.

Four years before, Weyenberg had suggested that the wave-mechanical theory of nucleons indicated a possibility of initiating chain reactions of nucleonic fission; and Project Texas had been begun. The end-result was the mass-conversion Fuse—a weapon that *could not* be used on Earth: for any matter of appreciable density was a fuel for the fire it kindled.

An indirect application of the weapon was necessary. A hundred-and-fifty-ton rocket was to be detonated in space, above the enemy's heartland.

Theoretical work, and small experimental detonations thousands of miles from the Earth, indicated that the reaction could not jump a large gap of vacuum or rarefied matter. But *if anything went wrong*

It was not impossible that the Earth might cease to exist.

The director came climbing down the

ladder from the door in the flank of the hundred-fifty-foot rocket. It was a pretty long climb, but his hands were steady when he reached the bottom. His voice was steady, too, as he spoke to the general:

"It's set."

"You checked everything?"

The director nodded curtly.

"All right." The general raised his voice. "Clear the launching area."

Scientists, army men, and rocket technicians began climbing into cars. For safety's sake, everyone was to be evacuated from a region within fifteen miles of the takeoff area. That was because of the radioactivity of the exhaust; if the Fuse were to go off prematurely, fifteen hundred miles would not be enough.

The director looked back from the door of his car. The floodlights had been turned out, and the field was dark except for car headlights. There was a bright star just above the pointed nose of the huge rocket. It was Mars.

The director shook his head regretfully.

"Come on," the general said from within the car.

IN THE control building, twenty miles from the rocket, there were three television screens. They showed pictures of the rocket as seen from five hundred, one thousand, and fifteen hundred yards, respectively.

". . . seven . . . six . five . . . four . . . three two one . zero ."

The television screen showed a glaring pillar of sun-stuff beneath the missile as it began to rise. The huge thing slid, slowly at first, up the screens; it gained velocity; it disappeared at the top of the first screen—then the second—then the third . .

Outside someone shouted: "I can see it!"

The general hurried to the door. The director sank into a chair and put his face into his hands. He stayed there, without moving, for a long time.

THE ROCKET tilted slightly as it rose; at a certain moment the pile quit supplying energy and the flow of exhaust mass ceased. The missile continued to rise along its carefully-calculated orbit, trading kinetic energy for potential. At apogee it was eight thousand miles up.

Shortly after it passed apogee, a timing device closed a switch, sending power into a special radar unit. All the way down the descending leg of the orbit, radar waves were leaving the rocket and fainter reflections from the Earth below were returning to it.

It was still two hundred miles up when the radar control decided: *now*—and sent a pulse of voltage to the Fuse set in one wall of the pile's heavy shielding.

The transformation of mass to energy was about ninety percent complete, according to calculations made later.

On the Earth, directly underneath the point at which the rocket vanished, rivers boiled and glass fragments melted into glowing droplets while still in the air. Five hundred miles away, forests and cities burst into flame. Nine hundred miles from the point directly under the explosion, men were blinded and received painful burns.

More than a thousand miles from the point beneath the explosion, the curve of the Earth cut off the direct radiation. Most of the damage outside the scorched circle was due to the winds that followed.

A week later, there were unusually violent storms in the western hemisphere—and the war was over.

THE TOOL must be supplied with the mobility necessary to the accomplishment of its task.

"But *why* do you want to go to Mars?" Congressman Goode asked.

Stefens mentally marshaled the familiar

arguments, then looked earnestly at the other man. "You understand," he said, "it isn't Mars particularly. Mars is just the next target, logically. It's space travel . . ."

"They've been on the moon," Goode stated.

"Yes." Patiently. "That was a nice beginning. Mars is the next step."

"But *why*?" Goode had black hair and heavy black eyebrows and the air of one who considers himself a stern realist.

"Space travel is going to be expensive," Stefens admitted. "But it will pay big returns in the long run. In knowledge. Pure research always pays off, in the long run."

"I've heard all that before, Mr. Stefens," Goode interrupted, "and it doesn't wash. Space travel—it's okay, I suppose. Some day someone will get to Mars. But right now you haven't got a chance of getting any government support. It'll be ten years—twenty—before we get far enough along putting the world back together to squander money on a—scheme—like that."

He reached for a paper on his desk. It was a gesture of dismissal. Stefens leaned towards him. "There's another thing," he said urgently. Goode glanced up impatiently.

"Nifelheim."

"What—?"

"Since the war Walvoord has been working on a new determination of the orbit. He's decided that Nifelheim will —*almost certainly*—have such a close encounter with Jupiter that the safety of the Earth will be emperiled."

Goode looked at him incredulously. "What the devil are you talking about?"

"The planet Nifelheim," Stefens said patiently, "the one that was first called 'Trans-Pluto', is going to collide with Jupiter."

"So what?"

"There will be fragments—up to several hundred miles in diameter—thrown into all sorts of unpredictable orbits. Some of those fragments will settle down and become permanent members of the solar system. Others will be swept up by the planets—perhaps by Earth."

Goode was frowning; he looked puzzled.

"Did you ever see a picture of Meteor Craters?" Stefens asked softly. "It's in Arizona—a hole punched in the Earth's surface, three-quarters of a mile across and six hundred feet deep, by a meteorite that fell several thousand years ago. That one was *little* compared with what we can expect to find flying around if Nifelheim hits Jupiter."

"What do you expect to do?" Goode said sarcastically. "Mount rockets on it and shoot it off into outer space?"

"No—blow it up."

"Blow—? How?" The congressman frowned again. "You mean—the Fuse?"

"Not the one they used over Asia," Stefens said. "A physicist named Harrison has worked all this out. He has shown that the total-conversion reaction they used to end the war would be much too powerful. Even at twenty billion miles, Earth would be blasted. But they've got other proton-meson reactions—and he says one of them is just feeble enough to do the job without any danger to us."

Goode seemed incredulous for a moment more; then his eyes narrowed. He was suddenly seeing the political possibilities that appeared when this business was considered as a congressional issue. Little phrases ran through his head: " . . *foresighted public official true regard for the future of mankind* ."

"*Somebody* is going to put this thing through," Stefens said forcefully. "The one who does it will be known as a great man through all history."

Goode settled back in his chair and absently lit a cigarette. Stefens fell silent. After about two minutes, the congress-

man looked up. "I think I can swing it," he stated decisively. "And I'm going to try. It'll take time, and more work than you probably imagine ."

He took another drag on the cigarette and looked quizzically at Stefens. "Now you can tell me the truth," he said. "Why do you *really* want space travel?"

Stefens was silent for a moment. "I don't know," he said finally. "I just *want* it.

THE PLANETARY clock was making its last revolution; to delay longer would be perilous. The tool must be used.

Six weeks of public hearings had built up world interest in the project to the point where it dominated every newscast. It had been the subject of thousands of conflicting magazine articles, speeches, sermons, and back-fence arguments.

And today Weyenberg was going to testify.

If any one man could speak with sufficient authority to resolve—or crystallize—the world's doubts about the plan to detonate Nifelheim, Weyenberg was that man. Among his associates in the field of physics, he was considered the most brilliant worker of his generation; to the Earth's populace, he was The Man Who Made The Fuse, the Genius, the Last Word on anything scientific.

The committee chairman cleared his throat. "Dr. Weyenberg. You realize that the point on which you are to is beyond question the most vitally important one we have to consider. Dr. Watson's testimony has established that a very real danger exists, in the impending collision of the planets Nifelheim and Jupiter. The reports submitted by the experts of the Bureau of Scientific Development show that, with a large but possible expenditure, the project can be carried out. The only question remaining—yet the most important of all—concerns the matter of safety."

The physicist dispassionately nodded assent.

"Dr. Weyenberg, the chairman said," "the questions you must answer are these: First, would it be possible, by detonating the planet Nifelheim with a mass-fuse, to eliminate the dangers that would follow from a collision of that planet with Jupiter? Second, in the event that the planet Nifelheim were to be so destroyed, would the process of destruction involve any danger *at all* to the inhabitants of the Earth?"

Weyenberg glanced at the first page of his notes, then raised his head to speak into the microphone on the table in front of him. "I have been interested in this problem," he said, "for over ten years." He spoke slowly and distinctly. "It occurred to me during the war that the so-called mass-transformation fuse might of-

MICHIGAN BAKER IS SLOW TAKER!

DETROIT, Mich.—"I just woke up to Calvert's better taste" says Eugene Miezaniec, "and here the Big Switch has been going on for years! But believe me, Calvert's *my* drink, from now on."

CALVERT RESERVE BLENDED WHISKEY—86.8 PROOF—65% GRAIN NEUTRAL SPIRITS. CALVERT DISTILLERS CORP., NEW YORK CITY

fer a means of averting the collision of the planets Jupiter and Nifelheim which was expected to occur during the next perihelion passage of the latter. I carried through preliminary calculations which showed that the total-conversion reaction used in ending the war would liberate altogether too much energy if used for this purpose.

"As a matter of fact, detonation of Nifelheim by means of that reaction would probably sterilize the entire solar system. The earth would be heated to a temperature of several million degrees centigrade."

There was an uneasy stir among the committee members and the audience.

"Fortunately, the total-conversion process is not the only one available. There exists a whole group of proton-meson reactions. These reactions are all similar in that they can occur in any kind of matter, since the reacting particles are protons and neutrons, present in all nuclei; however, they differ in the amounts of energy produced and in the efficiencies of transformation. My attention was drawn particularly to the pi-type reactions, to which wave-mechanical calculations assigned an efficiency of only ten to the minus eighth power. In other words, theory predicted that only one gram among a thousand million would be converted into energy.

"As Dr. Salzer of the Bureau of Scientific Development has already reported to you, experimental detonations employing pi-type reactions, executed on the opposite side of the sun, have shown that this theoretical result is correct: the efficiency of transformation for bodies having masses as great as a billion tons is—" He glanced at his notes. "—nine point three times ten to the minus ninth.

"On the basis of this value, I have calculated the effects to be expected from the detonation of Nifelheim by means of a mass-transformation fuse designed to initiate a pi-type proton-meson reaction. About fifteen percent of the energy released would be exhausted in the process of dissipating the mass of the planet against its own gravitational potential, the rest emitted as radiation. At the instant of the detonation, the planetary material would be raised to a temperature near one million degrees centigrade; at this temperature the atoms of most heavy elements would possess escape velocity, and calculations show that most of the mass of the planet would be dispersed as gases and microscopic particles over an enormous region. Much of it would actually leave the solar system."

He looked at the committee chairman. "I think that answers your first question."

When the senator nodded, he continued: "With regard to your second question, the calculations show that enough energy would fall on the surface of the Earth to raise the temperature of the hemisphere facing towards the explosion by about four-tenths of a degree centigrade, not possibly more than one degree centigrade.

"Thus there is no possible danger to humanity in the execution of the proposed project."

The committee chairman had been making notations on a pad; now he looked up.

"The crucial point, as I see it, is the efficiency of the reaction."

Weyenberg nodded.

"What assurances do we have that the value, ten to the minus eighth power, will be valid for a body as heavy as Nifelheim?"

Weyenberg hesitated, then said, "This value was predicted by wave-mechanical calculations, and was obtained experimentally in the tests described by Dr. Salzer. In these tests no dependence of efficiency on mass of the detonated body was found. We can't *know* that the efficiency is independent of the mass even for bodies of planetary size until we blow up a planet and find out—but as an as-

sumption, that's supported by everything we know about the reaction."

After a moment, he concluded, "I don't know of any competent physicist who seriously thinks there's any danger."

Another committee member cleared his throat. "Uh, Dr. Weyenberg. Don't you feel that it is somewhat—presumptuous—for us to undertake the destruction of a planet which has been a part of the solar system since the Creation?"

Weyenberg smiled a little. "Nifelheim is going to be destroyed," he said, "whether by us or by collision with Jupiter. If we do it, it is only to save human lives at a later date. ."

THE TOOL moved to perform its function.

That ship was a marvel.

Its construction had required ten years and fifteen billion dollars. Nothing like it could have been built at any earlier date; the basic principle of the drive had not been discovered until 1981.

It had an exhaust velocity that took five figures to express in miles per second. It carried a crew of twenty, and could make cruises lasting five years or longer.

A small fleet built in the same model would make the inner solar system as small, effectively, as the Earth had been in 1950. As yet, no such fleet existed—but an appropriation bill for the construction of a sister ship was in the World Congress when the *Star of Earth* left on its great mission.

The departure ceremony was the biggest thing since the end of the war. President Guthrason set the keynote:

"I have heard it said recently that man now stands at his pinnacle; this is not true. Man has just these last decades emerged from a wilderness; spread out before him he sees the golden plains of the future. This, his greatest engineering achievement, the annihilation of a giant planet, symbolizes a transition in man's history. Until now, man has been fighting himself—hence-forward, he turns his energies outward. His future, his destiny, the gigantic deeds of which he is capable now lie unobscured within the foreseeable future. ."

THE CREW included fifteen engineers and ship's officers and four physicists; the cargo was a small black suitcase that two strong men could carry, packed in several dozen bales of excelsior.

Acceleration at one gravity for almost two days gave the ship a velocity of one thousand miles per second. In free flight, the remainder of the voyage to Nifelheim lasted longer than six months.

In an orbit around the sun's outermost—known—planet, they photographed the surface with radar and measured the mass and the diameter. Then they landed.

Nifelheim had been well-named.

The rock of the planet's core was nowhere visible; the surface was buried to a considerable depth by the frozen atmosphere—oxygen and nitrogen in the upper layers, ammonia and methane below. The place had the appearance of Antarctica during the long winter night—only, of course, there was no wind. This world was gripped in the stasis of near-absolute zero. Outside the glare of the floodlights, the interstellar darkness was relieved only by the distant constellations and by the sun, which appeared as an exceptionally bright star of about the minus fourteenth magnitude. None of the nine familiar planets was visible to the naked eye.

They set their fuse to that frozen world, started its radioactive clock, and quickly departed sunward. The trip home seemed terribly long.

THE EXPLOSION had occurred. The light was on its way to Earth.

Nifelheim had been thirty light-hours distant; the flash was due to arrive some time that night. At Palomar, Mt.

Wilson, Lick, Yerkes, Symmons, MacDonald, and other observatories, telescopes were following the planet across the sky as the Earth rotated beneath them. When the flash came, photometers would record the intensity-curve spectrographs would analyze the light, photographic plates would record the event for future generations.

It was, after all, a matter of great scientific interest.

Millions of curious people in the western hemisphere stayed up that night—stood around on lawns and in parks gossiping and wondering if there would be anything to see. Dwight Stefens, who for inexpressible reasons had wanted men to visit the planets, sat with his wife and three children on the front porch of their house in Baltimore—waiting for the show. He was content; he had done his share to bring mankind to this moment.

Daniel Walvoord, aged eighty-seven, was inside the dome of one of the small telescopes at Mt. Wilson, talking with two young astronomers. He pulled out a handkerchief and honked into it. The nights were cool up on the mountain, even in June.

"Tomorrow," he said, "I'm going to go home and start rocking myself to death in a soft chair. When that—" he nodded towards the strip of southern sky visible through the opening in the dome "—comes, my work will be finished." He chuckled, ending in a wheeze. "It's kind of satisfying. It ties everything up, sort of . . ."

WEYENBERG was alone in the house that night. His wife was over at the neighbors', waiting up to see whatever display the sky might offer. He reached for the telephone, dialed hurriedly, and waited with impatience for someone to answer at the other end. He scratched the back of his head, then smoothed the gray hair.

"Hello, hello . . . Paul? This is Weyenberg. Listen, can you come over here right away? I've just run onto something big that's been right under our noses for seventy years. It may mean interstellar! . . . What? Well, something started me thinking about the phase waves that are associated with any particle in the wave-mechanical treatment. We've always insisted they didn't have any real existence, that the group waves were what carried the energy . . . And the phase velocity is always greater than the velocity of light! It turns out, that point is really important!

"I got started on it yesterday, and suddenly—you've had the experience—the clouds lifted and I saw the obvious, what we've been overlooking ever since Schroedinger. You see . . ."

Incandescence!

THE THEORY had been wrong. For bodies of planetary mass the efficiency of transformation was ten to the minus fourth power instead of ten to the minus eighth. The rise in temperature of the exposed hemisphere of the Earth was four thousand degrees instead of four-tenths of a degree.

THE TOOL accomplished its task. Nifelheim was destroyed, and a hundred-thousand-year epoch came to an end.

When the wall of energy from the detonation flashed past Jupiter, the hemisphere containing the Thing was facing away, shielded by all the giant planet's mass. The Thing suffered only slight damage—as it had planned.

It emerged from that short but crucial episode in its existence virtually unscathed but by no means unaltered. It had experienced huge tensions, had learned logic and developed a technique for dealing with events outside its own world. In forging

the tool, man, it had created new faculties in itself, and had realized for the first time some of its own potentialities.

It had awakened, once and for all, from its billion-year slumber.

The tool which it had built was obsolete, now that the job was done—a means to an accomplished end. The Thing on Jupiter had foreseen this moment and had determined, logically, what must follow.

It is not logical to keep an obsolete tool; neither is it logical to discard one which has required much labor and which has efficiently performed its function.

ON EARTH, when the storms died down and the temperature dropped to something like normal, there were not many human beings left. There was a strong anti-scientific movement among the survivors, who thought they knew whom to blame for the catastrophe. The material accessories of twentieth-century civilization disappeared quickly. By 2050 gunpowder had gone out of use and the return to barbarism was progressing rapidly.

By a curious—accident—an unusually large proportion of the babies born during the early decades of the twenty-first century were mutations. Man was beginning to pay, genetically, for his atomic wars.

In A. D. 2494, what was left of Nifelheim—an extensive collection of specks, driblets, and gases—made its perihelion passage, on schedule. For about three months there were brilliant meteor showers on Earth—where a dozen competing species of man were beginning the transition from animal to superman.

The age of *homo sapiens*, the atom-using animal, was over; his mission was fulfilled. In eighty thousand years a new humanity, a race of wizards with starlight in their eyes and lightning in their nervous systems, would undertake the next task which the Thing on Jupiter had conceived.

SEPTEMBER FORECAST

THE STAR BEAST

By Poul Anderson

The ancient enemy whose body served Harol's immortal brain in its ultimate flight was a fraud—a replica shaped by the miracle science of the last men. The real destroyer came striding terribly down from the stars—the forgotten beast-in-Man, bred out of helpless Earth for a thousand years!

In our next issue we are proud to present a distinguished novel of the far future by one of science-fiction's brightest new luminaries. You won't want to miss Poul Anderson's *The Star Beast*—plus top-grade science-fiction by Fredric Brown, Kris Neville, and many more of your favorite writers—all in the September *Super Science Stories*, on sale at all newsstands August 2nd.

—The Editor.

LAST RETURN

They were waiting, just outside the chill border of space . . . waiting to annihilate Earth's billion lives in their cruel jaws . . . and Kane's doomed countrymen would not, could not understand the terror-laden message he brought!

By ROGER DEE

IN THE chill confinement of his air-suit he fell endlessly, numb from the shock of too-sudden deceleration, giddy from the headlong whirl of Earth and sun and black space and pocked, crescent moon.

Far below and to the right of the air base toward which he fell he glimpsed a slow mushroom of white smoke where the *Stella I* had crashed in the desert, and even through his nausea and the cold fear of being too late with his warning, he felt a flood of sympathy for the dead ship. The *Stella* was as much a hero as Captain Oslo or Baker or Wisnacht, who had died covering his escape back on the moon's blind side, and she deserved a better end. She had borne men on their first leap into space, and her reward, like theirs, was death.

A thin keening against his suit drove away regret. He tugged automatically at his parachute release ring, knowing that he was far above safety level but afraid to wait for denser air that might tear his silk to shreds.

The brutal jerk at his shoulder harness left him sweating with terror, realizing for the first time the true speed of his fall.

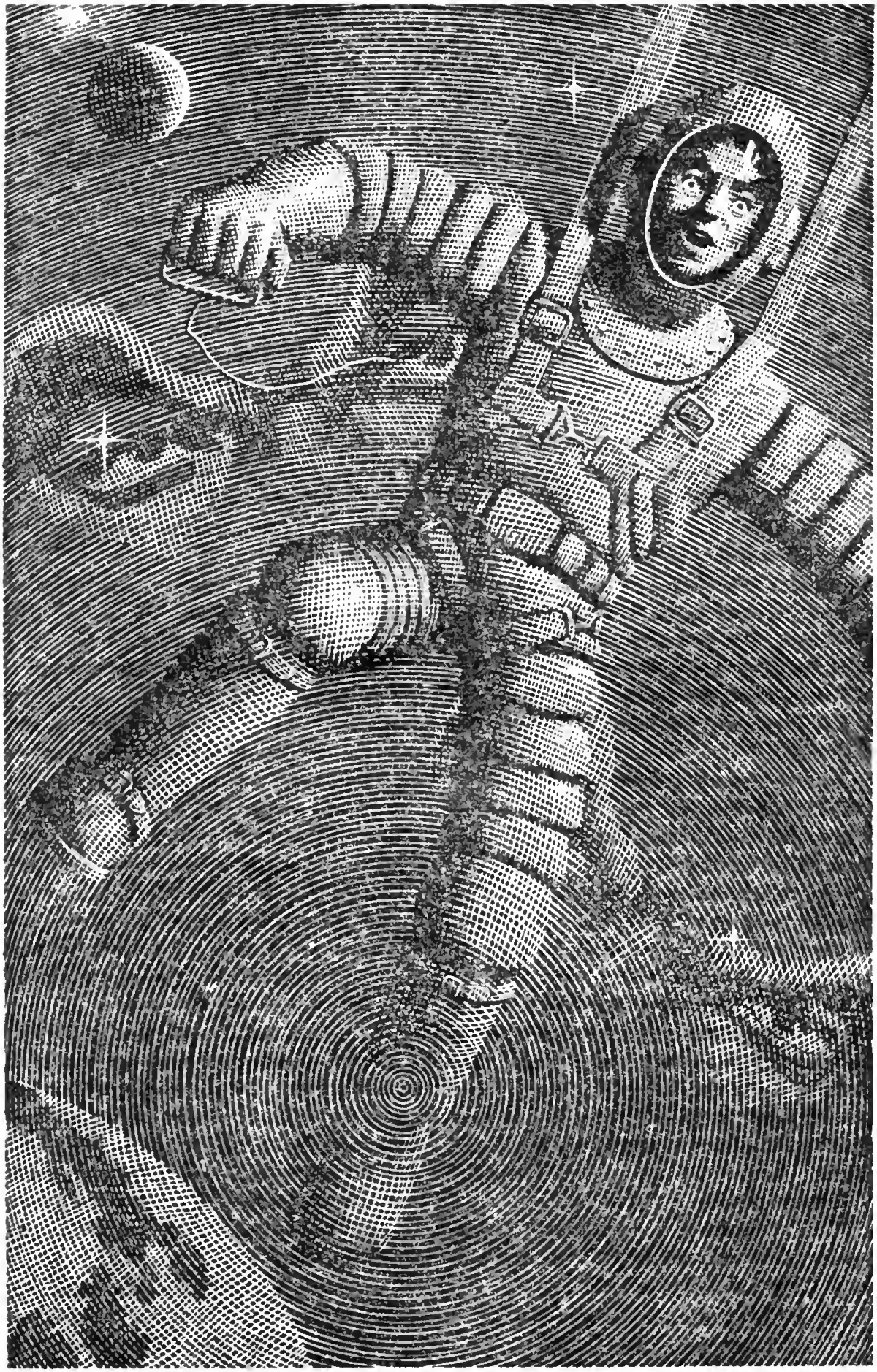
He *had* to land safely, this once he had to live long enough to warn the world of what the *Stella* had found back there on Luna's blind side. Earth must have time to prepare against the enemy gathered there, ready to spring like a starved cat upon a fat and unsuspecting mouse.

The pull on his shoulders mounted unbearably, dragging at his body until his joints cracked. He felt blood rush from his head, and he began slowly to black out.

The air base swung pendulum-wise below him, tipping crazily tiny figures raced upon its concrete aprons, staring up at him with pale, foreshortened faces above him he heard the thin ugly sound of ripping silk as his parachute began to split.

He lost consciousness.

He *had* to land safely he had to live long enough to warn the world.



HE AWOKE in darkness, seated in a moving wheelchair, his arm still smarting from the sting of a needle. He moved his body experimentally, and its response told him that he had, somehow, escaped from his fall without broken bones. His exploring fingers found his face bandaged from brow to chin, and he began to sweat again when he thought of what might have happened to his eyes.

The urgency of his mission drove out personal concern, and he turned his face blindly to the attendant pushing his chair.

"Did I tell them about the ships from Outside?" he demanded. "Did I tell them about the New Men gathering on the moon?"

"You were unconscious for some time, lieutenant," the attendant said. His voice evaded the question with a menial's practiced tact. "You talked a great deal in delirium, but it was—disconnected. I'm taking you now to the tape-room to make a full recording of your story for the authorities."

He tried to relax, fretting at the interminable hissing of the chair's rubber wheels on the corridor floor. An ironic thought jeered at him: *The whole human species teeters on the brink of extinction, and the courier rushing to warn it is borne to the rescue in a wheelchair, at a snail's pace.*

He knew when they left the corridor because there was a change in the air, a feel of being in a much larger room. The chair stopped and something round and smooth was placed in his hands, a twisted cord trailing from it across his blanketed knees.

A microphone.

"The recorder is in operation," his attendant said respectfully. "You may tell your story now, lieutenant."

He gripped the microphone tightly.

"I am Lieutenant Marvin Kane, communications officer of the *Stella I*," he said. "Captain Oslo and Baker and Wisnacht are all dead. Routine flight data can wait —I have other information more important, which must be acted upon at once before it is too late. . . ."

THE *STELLA I* had settled toward Luna's unknown hemisphere, bypassing the familiar Earth-turned face to make the most of the little time allowed her.

"We were awed," Kane said, "not so much by the craggy moonscape itself but by the thought that we—*we*, of all the billions that ever crawled the surface of Earth—were about to set foot upon the soil of another world. There was in each of us a sort of incredulous euphoria, but it did not last long."

The aliens had been waiting for them, and the capture of the *Stella* had been engineered with infuriating casualness. A ray stabbing up from the inky bottom of an unnamed crater, freezing every man at his post. Another ray gripping the ship and towing it derelict-fashion into the invader's base, and it was done.

"They have no city," Kane said. "Only a great transparent bubble, meteor-proof, which houses ships and equipment and personnel. It is no more than a supply depot between Earth and their home planet, wherever that is. We never learned where they came from, really, except that it is far outside our own system.

"We were imprisoned like cattle in a pen whose gate answered to a sort of mental control like telekinesis, with a lock as far beyond our ability to operate as a simple latch-and-hasp catch is beyond the understanding of a cow. It was not until we were called before our captors during one of their rest periods that we learned anything at all."

It was humiliating to find that every detail of the *Stella's* flight had been known in advance, that New Men planted on Earth held key positions in the very astro-

gation board which had plotted her course. It was worse to learn how far superior to Earthmen these unsouled aliens were. It was degrading, terrifying.

"They were less like us, though manlike, in the beginning," Kane said through tight jaws. "But for two hundred years they have worked to alter their basic strain to suit Earthly conditions, aping man's appearance for their own convenience. They call themselves the New Men because they have designed themselves to supplant us, and the joke delights them. They are utterly cruel, their only near-human trait a sadistic enjoyment of suffering that is a perverted mockery of our own humor. They are—fiends."

UNTIL this point he had held himself steady, but now his body began to tremble uncontrollably. He could not bring himself to confess, even to an impersonal recording tape, that the *Stella's* crew had been preserved only to provide entertainment for the New Men, that the antics of men amused the aliens as men are diverted by the inconsequent chattering of caged monkeys.

"Our great danger is that they are already here among us, worming their way into our government, coming and going freely in ships which we have seen for decades but which in our ignorant assurance we have dismissed with pale jokes or flat denial.

"They are so like us in appearance that they have only to dye their albino-white hair and to wear colored contact lenses over their eyes, which are a bright and startling yellow, to pass among us as men. They are posted throughout our entire social structure, and they are the deadlier because we do not know what form their campaign of conquest will take when it comes."

Open attack from their moon base, or a surprise onslaught from hidden strongholds on Earth? A holocaust of ships and bombs and slashing rays, or a stealthy massacre by clouds of lethal bacteria? Extinction by some new weapon, perhaps, whose deadliness surpassed the fumbling comprehension of men? Whatever it was —it would be final.

"We were held captive for five months," Kane said. "And in that time we learned this much—they are still few in number as compared to us, and there lies our only hope. If we can ferret them out here at home, even at the sacrifice of thousands of lives to one, we may still win the war which is coming. Remember that I know these New Men well—if we delay we shall be wiped out utterly, except for a handful whom they will keep alive for sport, caged like animals in a zoo.

"We kept watch in relays for five eternal months until our chance came, and

(Continued on page 127)

"PIN-WORMS may be A FAMILY AFFAIR"

Fidgeting, nose-picking and a tormenting rectal itch are often telltale signs of Pin-Worms . . . ugly parasites that medical experts say infest *one out of every three* persons examined. Entire families may be victims and not know it.

To get rid of Pin-Worms, these pests must not only be killed, but killed in the large intestine where they live and multiply. That's exactly what **Jayne's P-W** tablets do . . . and here's how they do it: *First*—a scientific coating carries the tablets into the bowels before they dissolve. *Then*—**Jayne's** modern, medically-approved ingredient goes right to work—*kills* Pin-Worms quickly and easily.

Don't take chances with this dangerous, highly contagious condition. At the first sign of Pin-Worms, ask your druggist for *genuine* **Jayne's P-W Vermifuge** . . . the small, easy-to-take tablets perfected by famous Dr. D. Jayne & Son, specialists in worm remedies for over 100 years.

JAYNE'S P-W (TRADEMARK) **for PIN-WORMS**

Two and a half million human beings died within minutes.

Could there be any conceivable excuse for the invaders who had wantonly blasted Venus into a molten hell? There was, the vengeance fleet discovered—and it was a reason all-conquering Earth could never forget—or remember without shame!

VENGEANCE, UNLIMITED

By FREDRIC BROWN

THEY came from the blackness of space and from unthinkable distance. They converged on Venus—and blasted it. Every one of the two and a half million human beings on that planet—colonists from Earth—died within minutes, and the flora and fauna of Venus died with them.

Such was the power of their weapons that the very atmosphere of that suddenly doomed planet was burned and dissipated, then replaced by steam from her boiling seas. Venus had been unprepared and unguarded, and so sudden and unexpected had been the attack and so quick and devastating its results that not a shot had been fired against them.

They turned toward the next planet outward from the sun: Earth.

But that was different. Earth was ready—not, of course, made ready in the few minutes since the invaders' arrival in the solar system, but because Earth was then—in 2820—at war with her Martian colony, which had grown half as populous as Earth itself and was even then battling for independence. Fortunately, at the very moment of the attack on Venus, the space fleets of Earth and Mars had been maneuvering for combat near the moon.

That battle ended more suddenly than any other in history. A joint fleet of Terrestrial and Martian ships, suddenly no longer at war with one another, headed to intercept the alien invaders and met them between Earth and Venus. Our numbers were overwhelmingly superior and the alien ships were blasted out of space, completely annihilated.

Fortunately, the weapons of the aliens for ship-to-ship combat were definitely inferior to those of the solar system fleets, despite the hideous destructiveness of the weapons they had been able to turn against defenseless Venus.

Within twenty-four hours peace between Earth and Mars was signed at the Earth capital of Albuquerque, a solid and lasting peace based on recognition of the independence of Mars and a perpetual alliance between the two worlds—now the only two habitable planets in the solar system—against alien aggression. And already plans were being drawn for a vengeance fleet, to find the base of the aliens and destroy it before it could send another fleet against us.

Instruments on Earth and on patrol ships a few thousand miles above her surface had detected the arrival of the aliens—though not in time to save Venus—and the readings of those instruments showed

the direction and distance—an utterly incredible distance—from which the aliens had come.

An incredible distance, but not too great for us to span. The C-plus (faster than light) drive had been developed two centuries before, and the C^2 (light speed squared) drive had been known for forty years. It had been used to explore the farthest reaches of our own galaxy and some explorations had been made in two hundred other galaxies. But the Earth-Mars war, then in its seventh and last year, had greatly reduced the number of expeditions exploring the universe. And up to that time no expedition had discovered either an intelligent alien race or a suitable planet for colonization by Terrestials.

But now man knew not only that an intelligent alien race existed, but that it was inimical to us. In one attack, it had dealt a staggering blow to the human race—not because two and a half million people had died, out of seven billion, but because the planet itself had been made uninhabitable, at least for centuries and possibly forever.

So Earth and Mars combined their efforts and their technologies to wipe out the aliens. It took ten years to build that fleet and much that was new went into it. The C^2 drive was improved by 12%; there was no theoretical limitation, but that was the practical one imposed by the geometrically increasing weight of the drive itself as the C^2 speed was exceeded.

Ten years to build—and the trip would take another ten, even at the C-squared-plus. Of course suspended animation of personnel took care of that; it was used on any space trip longer than a month. Life in the crowded quarters of a spaceship—and especially one moving at any C-plus speed, with nothing visible from the ports except blankness—is intolerable for longer periods.

The vengeance fleet—not large in number, but incredibly powerful—left Marsport in 2830.

Nothing was ever heard of it again.

Not until a full century later did its fate become known, and then only by deductive reasoning on the part of Jon Spenser 4, the great historian and mathematician.

"We now know," Spenser wrote, "and have known for almost a century that an object exceeding the square of the speed of light travels backward in time. It has long been recognized that the vengeance fleet would have reached its destination—by our time—before it started.

"We have not known, until now, the dimensions of the universe in which we live. From the experience of the vengeance fleet we can now deduce them. In one direction, at least, the universe is $1.12 \times 186{,}334^2 \times 60 \times 60 \times 24 \times 365.25 \times 10$ miles across. The Solar fleet, traveling in a straight line, circled the universe to the point of its departure, ten years before it left. It destroyed the first planet it saw and then, heading for the next, its admiral must have recognized the truth—and the fleet that came to meet it—and given a cease-fire order at the instant the Earth-Mars fleet reached them.

"It is truly startling—and a seeming paradox—to realize that the vengeance fleet was headed by Admiral Barlo, who had also been admiral of the Earth fleet during the Earth-Mars conflict at the time the two fleets combined to destroy the invaders, and that many other men who were in the Earth and Mars fleets on that day later became part of the personnel of the vengeance fleet.

"It is interesting, but completely futile, to speculate what would have happened had Admiral Barlo, at the end of his journey, recognized Venus in time to avoid destroying it. He could not have done so, for he had *already* destroyed it—else he would not have been there as admiral of the fleet sent out to avenge it. The past cannot be altered."

THE SCIENCE FICTIONEER

Conducted by Frederik Pohl

GATHER, DARKNESS! by Fritz Leiber. Pellegrini & Cudahy.

The time is the future; the place is here. In the wave of hysteria following the Great Wars, the government of the world has been taken over by a giant new church—a false theocracy that keeps itself in power by iron repression and carefully manipulated "miracles". All of the super-science developed by warring nations is at the command of the church—flying "angels", atomic-powered, that conceal priestly pilots within their metal bodies; sacred haloes floating over every member of the hierarchy (actually the radiation effects of the secret energy weapons they wear); supernatural showers of gold coins and tidbits of food; in short, every divine manifestation from the folklore of every race—and more. The system is omnipotent—and perfect, and when a small band of rational men and women challenge the super-totalitarian church-state, they are forced to fight with its own weapons, on its own ground. The result is a tremendous spectacle of man-made wonders, with pace, drive and suspense enough for a dozen ordinary books.

It would take a showman and a scientist to write this *Gather, Darkness!*—and Fritz Leiber, son of the late Shakespearean actor of the same name, a stage veteran in his own right and editor of a scientific magazine to boot, has credentials in both trades. Moreover, he is a writer of skill and forcefulness; you'll enjoy *Gather, Darkness!* as much as any science-fiction novel of the last decade.

MEN AGAINST THE STARS, edited by Martin Greenberg. Gnome Press.

Here at last is an anthology which has a reason for existence beyond the fact that the stories in it happened to be handy when the editor went collecting—a book with a plan and a purpose, both of which it admirably fulfills. In *Men Against the Stars,* Martin Greenberg has gone to the works of a dozen favorite science-fiction authors to find their predictions of space-flight, and assembled them into a carefully thought-out history of man's travel to the stars. Beginning with Isaac Asinov's brilliant *Trends*—the story of the first rocket to the moon—and climaxing with L. Ron Hubbard's nostalgic *When Shadows Fall,* wherein the cycle is completed

These reviews are offered as a service to science-fiction readers, to help guide them in the selection of worthwhile science-fiction and fantasy books. For further information on these or any other fantasy books, send a stamped, self-addressed envelope to the Book Review Editor in care of this magazine.

as the descendants of the star-explorers return to Earth, the twelve stories tell the tale of what lies ahead as convincingly as any novel. It is no accident that each of the stories is among the best of its author's works. Among the contents are Hal Clement's *Cold Front,* Murray Leinster's *The Plants,* Harry Walton's *Schedule,* A. E. van Vogt's *Far Centaurus* and Manly Wade Wellman's story of the first rockets to Mars, *Men Against the Stars,* from which the anthology takes its name. There is an introduction by Willy Ley detailing the present-day scientific facts behind the prophecy of space-travel, which will supply you with ammunition for plenty of arguments. And there is a foreword by the editor which you might as well skip. For reasons best known to himself, he makes in it a disavowal that the stories he has selected can be considered "good literature". And he couldn't be more wrong.

NOMAD by George O. Smith. Prime Press.

Guy Maynard, a commissioned Junior Executive of the Terran Space Patrol, is kidnaped right out of the middle of the Patrol's "impregnable" Sahara Base by a desperate Martian. He is tortured by the Martians to get war information from him; in the middle of the torture his comrades of the Patrol, unable to rescue him, fire on the Martian spaceship which has abducted him. The ship goes hurtling out of the Solar System, killing the low-gravity Martians and almost killing Guy. But he is rescued by an observer from an invisible, wandering planet called Ertene, and from then on his career is meteoric, culminating in a tremendous four-way space war involving Mars, Earth, Ertene and a legion of planetless warriors captained by Guy Maynard himself.

Synopsis cannot do justice to this book, for the plot of it is farcical and the book itself is not. It is swashbuckling space adventure, true. But it is plainly labeled so, and it is a Grade A Prime manifestation of its type. If you're looking for subtlety or fine writing, you'd better look somewhere else. But if you want tingling action, colossal space struggles and a whole new arsenal of super-scientific weapons, by all means invest in a copy of *Nomad;* you'll wait a long time for a better space opera than this.

THE LADY DECIDES and THE ETERNAL CONFLICT by Colonel David H. Keller, M.D. Prime Press.

These two books, published in limited editions of four hundred copies each and individually boxed, are not likely to be of great interest to the average science-fiction reader. But in his long writing career Dr. Keller has won a considerable following, and for those fans the books are definite "musts". Neither is, by any stretch of the imagination, science-fiction. *The Eternal Conflict* is amorous allegory constructed according to James Branch Cabell's master-blueprint for this genre; *The Lady Decides,* apart from the occasional intervention of an old man in brown who appears to personify either Death or Destiny, is scarcely fantasy at all. In *The Lady Decides,* a young Georgian of one of the South's best families goes to wander as an itinerant lute-player in Spain, winding up—in typical Keller fashion—as a partner in a firm specializing in the export of olives. The Georgian's name is Henry Cecil; this same Henry Cecil, but equipped with an entirely different history and pedigree, turns up again in *The Eternal Conflict*—as, indeed, he does in many of Keller's published stories, for "Henry Cecil" is one of the transparent masks behind which the author hides his own personality and self. It would be useful if the other characters in *The Eternal Conflict* were as easy to identfy; among them are a Woman, immortal and all-knowing, and sometimes referred to as Anaitis; another Woman, also immortal, the mother of the

first Woman and sometimes appearing in the shape of a Cat; a Dragon; a Harpy; a Unicorn; a Mathematician named Hiram Schwenk; and a great many others. *The Lady Decides* and *The Eternal Conflict* were issued with uncut pages. After the four hundred copies of each are distributed, it would be instructive to round them up again and see how many of the pages are still intact.

WORLDS IN COLLISION by Immanuel Velikovsky. Macmillan.

Few books have had the advance publicity of this first section of a projected trilogy; one of the nation's leading literary magazines led the parade months before its publication date, a huge national weekly featured it with a weasel-worded "this-may-not-be-*exactly*-true" introduction; and the number of lesser magazines and newspapers that have contributed to its press clippings cannot be estimated. Yet, on seeing the book itself the question that confronts the reader is not so much "What was all the fuss about?" as "Why was it published at all?"

Dr. Velikovsky has seen fit to attempt to reconcile every Bible story and almost every other legend from all religions and folklore with scientific fact by inventing a single titanic upheaval of the solar system, occurring almost four thousand years ago, to explain them all. This is, of course, fair game for any scientist; but what a scientist ought to do, and what Dr. Velikovsky does not do, is to use the experimental data—in this case, the legends themselves—just as they come to him. In "editing" and "correcting" the legends—a discrepancy of a thousand years in dates means nothing to Dr. Velikovsky—he effectively destroys them; it would have been more sporting to invent brand-new legends.

Concerning the "scientific" basis for the phenomena Dr. Velikovsky describes, only two conclusions are possible. One is that every bit of present-day scientific knowledge of planetary movements is completely and pervertedly wrong; the other conclusion is the one adopted by this reviewer. Reading *Worlds in Collision* after its preliminary heralding in the press is like no other experience in life—except perhaps that of hearing the rumble of far-off thunder, and then discovering it is only a small boy shaking stones in a drum.

A GREAT FANTASY CLASSIC—

The Adventure of Wyndham Smith

By S. Fowler Wright

Hunted by a man-made monster, they fled into an empty world, two last survivors who dared to gamble for the dawn of a new forbidden day. . . .

Here's a powerful, darkly prophetic novel of what could well be some man's tomorrow, by one of today's best writers.

Famous 25¢
FANTASTIC
Mysteries

Don't miss "The Adventure of Wyndham Smith." It appears in the June issue of *Famous Fantastic Mysteries*, on sale at all stands now.

ESCAPE to FEAR

Relentless as death itself, the alien destroyer followed them through every twist and turn in the gray half-world of superspace . . . toward a grim rendezvous to which, no matter how they struggled, all roads led!

By PETER REED

AT T.O.T. plus eight thousand three hours, the light experimental cruiser *Oberlin* dropped through a fold of superspace to take objective time-space fixes on the 23rd Island Universe as an astrogation check—only to find, instead of the extra-galactic emptiness that never ceased to be horrifying to the most seasoned crew members, a Gaice battle wagon within a scant thirty thousand miles.

Fane, the watch officer, was at the controls, and in that moment of shock seven years of training paid off. As though slapping at an insect, his hard palm whacked back the switch he had just opened, reducing the mass of the *Oberlin* to that fractional part of an Earth-weight ounce expressed by one over three times ten to the ninth power.

The following fifteen minutes of violent nausea experienced by crew and the solitary passenger indicated that had Fane's reflexes been slower by a hundredth of a second, the *Oberlin* would have sped on through superspace carrying its load of corpses until at last the weakest link in the drive devices failed.

The *Oberlin* fled through the rolled and viscid grayness that was in part a negation of objective reality, and in part that prosaic MVi factor so cleverly parenthesized in the Schenweiss equations.

The *Oberlin* carried Captain Luce, a commander who had acquired a certain lack of favor back in BuGalNav, two junior officers, Fane, who was seasoned, and Lorrity, who was not, three hardbitten enlisted technicians—Cantor, Simmins and Holzer—who were reliable because of their almost psychopathic lack of imagination, and Dr. Klaus Wasterno, a jolly Santa type possessed of a red face and the coldest blue eyes in Topographical Physics.

The cruiser itself was a projection of the third Schenweiss equation expressed in sixty-three alloys (seven of which were new), twelve families of plastics and four relatively inert elements whose gentle bombardments were so mingled that their basic animosity resulted in fusion and fission of an estimated ninety-three percent average efficiency. Built into this physical extension of a mathematical concept were those factors essential for the sustaining

● **In that moment of shock, seven years of training paid off. . . .**

of life while the *Oberlin* moved from place to place through a gray timeless area which Schenweiss, for want of a better name, had termed "the half dimension".

The seven of them gathered, at Luce's order, in the small communal lounge, the only space on the ship that was not entirely functional.

Gray ghosts that wavered and droned as they fled through the incomprehensible. Gray faces and weakness and dismay.

"Out here!" Luce said. "Figure the odds. Just try to figure them!" He was a bull-necked man with a face ravaged by that most delicate vice, ambition.

"Release," said Dr. Wasterno, "one grain of sand within the gravitational attraction of the Earth and compute the possibility of its striking squarely a second grain of sand, a specific second grain of sand in the Sahara. The odds would be the same. Is it important?"

"To me this happens," Luce said. "To me! How much can a man stand?"

"To personalize it," said Dr. Wasterno, "is as pointless as estimating the odds against its happening once it has happened."

Luce glared at Wasterno. "What do you know about it? What do you know about luck? This was a last chance. You're a civilian. This is our problem, doctor, but you, at this moment, are as inevitably dead as we are. Now there'll be no return trip, no report on the twenty-third I. U. as a potential base against them."

The two young officers had been looking at Luce and thinking of his reputation and thinking of how, as they achieved promotion, they would not make the mistakes that Luce had made. For a time they had forgotten death.

Simmins came back from the screen. He shrugged. "They picked it up okay, sir. Any time now, I'd say."

"I didn't ask for opinions, Simmins," Luce snapped.

"I do not understand all this hopelessness," Dr. Klaus Wasterno said, smiling nervously and automatically.

"There are no effective evasive actions we can take, that's all," Luce said. He turned to Fane. "Go snap us out and into any course you like, mister. It'll give us time, but I don't know what for."

The six of them waited in the lounge. The wavering grayness vanished as though it had never been and reappeared in such a small fraction of a second that Lorrity, who had blinked at that moment, missed the tiny moment of reality.

Dr. Wasterno said, "But—"

There was exaggerated patience in Captain Luce's voice. "Over the past twelve years, doctor, probably forty of our light ships have been trapped by a Gaice heavy. You know that when heavy meets heavy on even terms, we have the edge. But we've never acquired or understood their ability to close with and destroy light craft in spite of all evasive action that can be taken. They can follow us in superspace and they are faster. If the fleeing ship stays in superspace the Gaice inevitably catches up. The only maneuver that is even partially effective is to cut out of superspace, take a new course and cut back in. During the interval of objectivity the Gaice flashes on by. They cut out as soon as they can and pick up the track again. But inevitably, one of two things has happened. No matter how random the maneuvers have been, the ship that flees will sooner or later drop out of superspace to find the Gaice within range and waiting, or our ship will change course, again at random, to find the Gaice, for all practical purposes, alongside. They have a knack of anticipation that we neither have nor understand. No ship has ever escaped once it was contacted too far from any of our fleets to run for cover in superspace. We are very obviously too far away to turn and run. If we stay in superspace they'll have us in no less than

twenty hours. If we dodge at random we can last a month, three months, even a year. If we attempt to establish a pattern in the evasive action, so that each successive maneuver takes us closer to home, they'll get us in a week."

"So!" said Dr. Wasterno softly.

"We'll make it rough on 'em, won't we, sir?" Lorrity asked.

"Rough, mister? They don't know the meaning of the word. They're as immune to pleasure or unhappiness or any other human emotion as a—an annelid. And just as rational as an integral calculator. If you can say they think, in the way that we know the word, they are now thinking—here is an enemy ship. We have found it. We will chase it and we will kill them. Don't assume they think of it as a sport, any more than an amoeba thinks of eating as sport."

"All my life," said Wasterno, "has been concerned with the location of a point in space. We are that point and now they practice my profession, eh?"

Luce ignored him. He turned to Lorrity. "Put the status report on the tape for instantaneous transmission and hook it up so it gets sent the next time we drop out."

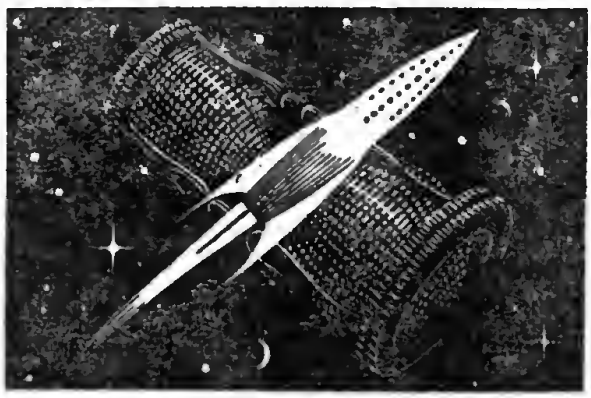
"Yes, sir," said Lorrity. He licked his lips. He wondered who would tell Rita about him. He hoped that when that last moment came he wouldn't scream.

Cantor took a greasy pack of cards from his coverall pocket and laid out a game of solitaire on the table-top. Luce put Holzer on the screen. Seven men waited for death. They did not meet each other's eyes in the pervading grayness, in the subtle distortion of line and shadow of the half dimension. The red pips on Cantor's cards were gray-black and the black pips were pale.

"It cannot be so," Wasterno said softly. "It is something impossible that they do." He found a paper and pencil and began to make computations. After an hour he moved back into his tiny personal cabin and closed the door.

At the end of four hundred hours the pursuit had become all there was of life. The dogged tenacity of it stretched nerves to a high, thin pitch. Once, when they dropped out of superspace the Gaice heavy appeared at the same instant, seventy thousand miles off the starboard bow, after having been off the screen for so long that false hopes had arisen. Had their estimate been better by half the pursuit would have ended in that same moment of incredulous recognition.

Dr. Klaus Wasterno went to Captain



"If we attempt to establish a pattern . . . they'll get us in a week. . . ."

Luce in his quarters and said, "I must understand more clearly the mechanics of the changes in course."

Luce propped himself up on one elbow. "Why?"

"Because I think I know what they do in that ship that follows us, captain. And if I know clearly what they do, then we can take a further step and they cannot catch us."

"Stick to your arithmetic, doctor. I'm commanding this ship."

Doctor Wasterno beamed jovially. "It occurred to me that certain appreciation would accrue to the first commander to successfully evade the Gaice when trapped."

Luce was immobile for long seconds. "Have you got something?"

"First tell me one thing. While in su-

perspace our course is irregular, but speed is constant. And I know that the course pattern for the superspace period is set in advance. But how is that done?"

"We assume superspace to be three-dimensional for the purpose of our evasive action. So we take one of the tapes and punch it at random with a stylus and feed it to the automatic pilot. As each hole in the random tape reaches the pilot beam light shines through onto the plate and ...ds us off in a random direction at a previously unknown angle. There is no chance of a pattern, you see."

"This is a problem, captain, in infinities and also in the theory of randomness. I suspect your method is no good."

Luce scowled.

"It was devised by some of your people, doctor."

"It fails to work, thus it must be no good. That is a starting point. If we were dealing with a weak infinity, aleph sub zero, a number progression, they should catch us in minutes. For a stronger infinity, aleph sub one, such as the points within a cube, it should take them longer, but they should be able to solve the problem. But here we are dealing with the strongest infinity yet known, aleph sub two, the diversity of geometric forms, and if it were completely random they should never anticipate or catch us at all. Mathematically I can prove that it is impossible for them to catch us if the evasive tactics are random in the pure sense. Thus there is pattern. When we find the cause of the pattern, we know how to avoid making that pattern."

"It's definitely random," Captain Luce said.

"Have you a record of what evasive action we have taken?"

"Certainly. On the automatic log, expressed in numerical terms. Angles and degrees from the established reference point—Sol."

"I must look at those figures. And you must do one thing to give me time to learn what I must learn. Have three persons prepare the next tape. The first to punch not very many holes and the second more and the third to fill the tape."

"That doesn't make sense," Luce objected.

"Captain, if you would just do it—"

"All right, all right!"

THE LACK of integral calculators forced Wasterno to select the simplest possible relationship to prove his point. He decided that the interval, the frequency of the shift from superspace would give the best results when plotted.

In twenty hours he was satisfied with what he had discovered. He took his chart to Captain Luce. He had drawn it in the form of a frequency distribution. The curve was regular.

Luce took it. "What's all this?" Fane and Holzer moved inconspicuously closer. They looked over the captain's shoulder at the chart.

Wasterno took on a lecturer's mannerisms. "As the shift from superspace to objectivity is instantaneous we can assume that we have a problem on the same order as determining the number of points in a line. An aleph sub one infinity. This tabulation resulted from the tapes that you yourself prepared in what you thought was a random fashion, captain. If it were truly random there would be no discernible pattern. Now assume that on the Gaice ship they have prepared such a curve, that they have automatic equipment which will produce within itself this sort of curve and advise of the greatest possibility. You see here that the greatest probability, with you preparing the tape, would be an interval of one hour, seventeen minutes and eleven point eight six three seconds. If I were on the Gaice ship I would adjust my own pattern to this chart with a greatly increased probability

of anticipating the evasive movement of this ship."

"But I punched the tape at random!" Luce complained.

"You thought you did. Evidently the act of punching a tape at random is impossible for a human. You punch with certain individual characteristics that can be sorted out, in much the same way as it is impossible for you to completely disguise your handwriting. I used the simplest relationship. I believe they can also detect the greatest probability in the new courses selected. Once the fact of individual detectable patterns is admitted, it is not difficult to see how a relatively simple electronic calculator could consistently correct for each new datum and be so geared to the drive of their ship that their course would be automatically set for the greatest probability of duplicating our next move."

Luce's jaw tightened. "Then the answer is to have all seven of us prepare the tapes. Destroy the pattern. We'll try that and see if it works."

"It will work well for a time," Wasterno said, "because it will give their equipment a flood of new data to absorb and correlate, but sooner or later their equipment will discover a pattern in tapes made by the seven of us. It is inescapable. It will make their task more difficult, but not impossible, as we cannot avoid, even with seven working together, a pattern which will be the result of the amalgamation of our individual patterns. But I suggest we do it until we can discover some way of punching the tape which will be purely and mechanically random."

"Dice are supposed to be pretty random," Holzer said.

Wasterno thought that over. "No. We can't measure them accurately enough for precision. And they might have to be rolled ten thousand times before we'd find a deviation from randomness based on some tiny inaccuracy in weight or dimension. Their equipment would find such a flaw before we did."

LUCE, sour and embittered, was retired eight years later with his unchanged rank of commander. Fane was killed in that vast and indecisive battle which so weakened the Gaice that they withdrew to their home galaxy. Dr. Klaus Wasterno died on the return trip of the *Oberlin* from the 23rd Island Universe, his heart weakened by the strain of eluding, for the first time, a Gaice pursuit. What happened to Cantor and Simmins is not known. Lorrity is in command of a light scout ship which makes periodic patrols with impunity deep into Gaice-held space.

Oddly enough, it was Holzer who was honored. On Corinthia there is a heroic bronze statue which shows Holzer on one knee, crumpled currency in his left hand, a wry smile on his rugged face as he looks down at the small ivory cubes in front of him.

The principle, of course, as stated in Wasterno's report, is that there is no discernible pattern and thus a complete randomness in any numerical listing obtained by using any device which selects a digit by chance and then is not used again for any other digit in the listing.

It is laughable to think of those seven men making, throwing, melting and recasting those thousands upon thousands of dice so as to obtain the random ten-digit numbers which, translated into direction and interval, were then punched on the escape tape.

Now, of course, it is a simple matter for Captain Lorrity once pursuit starts. The process is completely automatic and so geared to the drive that even the tape has been discarded.

It is a simple matter to connect the terminals of the small black device to the posts on the control panel.

It is called, of course, "the dice box".

"There were men who chose to resist. . . ."

Perfect counterfeits of imperfect Man, the ultimate machines wept, danced, loved and died . . . while in a musty room, Earth's one remaining warrior prepared the greatest irony of all—the final chapter in Adam's bloody history, written in the tears of his last son!

The METAL SMILE

By ALFRED COPPEL

GREGOR sat alone in the firelit room, the thinkwriter quite forgotten on the table beside him. His long, somber face was still faintly reddened by the fading sunset that lightened the western skies beyond the sweeping curve of window, but night and darkness were welling up out of the canyons of the City below with a blue murkiness that stirred thoughts of decimation and decay.

The City stretched out toward the horizon, a functional pattern of spheres and oblongs and blind cubes that clashed with the deliberate savagery of the book-lined study. The firelight splashed on rough-hewn oaken beams and archaic tapestried walls. There was an illusion of strength and vitality about the room, about the entire house, that separated it spiritually and physically from the sterile utilitarianism of the City. But it was false, Gregor thought bitterly. The automata had built it.

There were few lights in the darkness of the City now, for the artificial men needed none, and even the few humans still living among them had been well conditioned to night vision before leaving the Crêche. Gregor stared at the sunset, caught for a moment by its delicate, fragile beauty. Darker and darker grew the sky, until at last the brilliant eye of Venus pierced the ruddy mists and hung like a gem above the City. There were times—times such as these—when Gregor could almost forget his sullen grief for the passing of humanity. There were so few humans left. . . .

Voices, coming from beyond the half-dilated doorway to the living room, broke his reverie. Delta's friends were still about, and he could hear their conversation quite clearly. Their strident, chattering tones pierced the evening calm, and Gregor listened without a qualm.

Mira was saying: ". . . but how clever of you, Delta, to have caught the past so beautifully here. Really, you should see what Annalee is trying to pass off as authentic Century Twenty!"

Gregor shuddered slightly as several

of the women laughed. It was a sterile sound, sharp as glass and without humor. He wished that Delta would stop inviting Mira to her gatherings.

"I really can't take credit for all this," Delta's voice came back. Gregor shut his eyes and half smiled. He loved the sound of Delta's voice. It was husky, vibrant, *human.*

"Gregor handled the decor, you know," she said. "He had it all done like this by the work-machines long before I came to live with him."

Mira laughed again and Gregor flinched unconsciously. "Gregor, the dear boy! It does show his touch, at that. Of course, he wasn't *quite* so atavistic when *I* was his companion, but that was a long time ago. ."

Gregor knew that Delta was smiling as she replied: "No, Gregor's interest in the past has grown in the last few years. He loves to be surrounded by his relics now." There was a slight pause. A self-conscious one, Gregor thought. "He's writing a History, you know, of the last three hundred years. . ."

Gregor smiled wryly to himself. He had actually been hoping to detect a skein of jealousy in Delta's voice, but that wasn't possible. Delta was too well integrated for that; and then, of course, there was the fact that Mira was an automaton.

THE SMILE vanished. Gregor stared moodily out across the City. The women's voices faded as Delta escorted them out onto the terrace toward their roboplanes, and depression fell on Gregor like a cloak.

That was the trouble, he thought with sudden bitterness. The world was no longer really human. Half the "women" saying their pleasant good-bys out on the terrace were automata. The human birth-rate was almost zero, and the Crêche conditioned the few young humans left to forget their childhood and begin life on terms of perfect equality with the artificial people. Everything that underlined the differences between men and the class one automata had been stripped away. Old age and childhood were unknown. Men lived out their lives in a state of ageless, unchanging maturity, side by side with the automata. But it was not stasis. The machine could withstand a perpetual *status quo*—mankind could not.

Humanity, unnecessary now, was becoming extinct.

Gregor stirred in his chair and reached for the thinkwriter helmet. A figure materialized out of the shadows by the hearth and laid the helmet in his hand.

"Can I get you something else, sir?" asked Roberts.

Gregor stared up at the android's impassive face as though he were seeing it for the first time. "Roberts—"

"Yes, sir?"

"I—Roberts, do you mind being an—automaton?" Even as he said it, Gregor wished he had not. The words sounded naked and infantile. But the android showed no surprise. His class could not.

"No, sir. As a class three, I was created to serve humans and class ones. I do this perfectly, for I was made perfectly. I would not wish to be other than I am. I resemble my betters, but I have neither their sensitivities nor their weaknesses, sir. I would not care to be a class one or a human being, sir. Such a desire would be impossible for a class three, as you know, sir."

There it was again, thought Gregor, cringing inwardly. The faintly patronizing air of the perfect machine. He sensed it everywhere these days.

"Of course, sir," offered Roberts courteously, "I understand that there are many class one automata—those who are made at the Crêche and conditioned along with the young humans—who are not aware of their true nature and who

might wish to be other than they are. The more sensitive a machine, the more likely it is to feel discontent. It is one of the unfortunate facets of life today. But these automata must be made and trained so, in order that they may take the place of man when he is at last extinct."

A sick throbbing moved into the pit of Gregor's stomach. He had a sudden urge to strike Roberts, to smash the complacent composure on the impassive, perfectly proportioned face.

His voice sounded thick as he said: "So I understand, Roberts. Thank you. That will be all."

The android glided soundlessly into the shadows again. Gregor sat staring into the fire.

It was absurd, he told himself, to let go like this. It must be the result of faulty conditioning, and he should have it corrected at once for the sake of his sanity. But he knew he would not. He was an atavism in this gleaming mechanical world. An atavism that clung to his battered feelings of superiority—to his *humanity*—desperately, savagely. He was shocked by the intensity of his feelings, by his hatred of the automata. But it was a delicious sort of shock, a real emotion in a counterfeit world.

With an effort he brought himself under control. He couldn't let Delta see him like this. She would not understand. Her conditioning had been perfect. To her, the automata were equals.

And Delta, he thought, suddenly afraid, was his only hope.

GREGOR'S hands trembled as he placed the thinkwriter helmet on his head. He paused for a moment to collect his thoughts. He was really too upset to write, but his History had become a therapy. It was important. No one would read it, but it was important—to him.

He drew a deep breath and thought: Chapter Thirty-seven. The machine on the table clucked softly and wrote: *CHAPTER XXXVII.*

"By the end of the Twentieth Century, atomic power had become an everyday reality. Power plants of minute size were in daily use, and a readily portable source of almost inexhaustible power became available to those scientists who dreamed of robot labor for the benefit of their fellow human beings. The science of plastics had long since duplicated human tissues. It remained only for the cybernetics to reach the full development of their craft.

"By the time, however, that the primitive thinking machines of the Middle Decades had reached their evolutionary midpoint, it became apparent that a sinister trend had been firmly established in human affairs . . ."

Gregor stopped the machine and turned his face outward toward the darkling City beyond the sweep of the curving window. The Censors, he thought, would never pass that last statement. And the Censors were infallible, of course. They were automata.

For an instant, Gregor felt something closely akin to panic rising within him. He felt the physical sensation of his humanity being submerged in a sea of meshing gears. His breath seemed to catch in his throat.

The terrace lights had come on, casting long, distorted shadows into the study. All of Delta's friends had gone. All but Mira. Gregor could hear the two speaking in low tones outside. He heard himself mentioned. A crazy little wind-devil of thought rushed through his mind. His woman was exchanging intimacies about him with an android. A counterfeit person. A thing not alive at all. A shudder of revulsion shook him. How could he have been so . . . so *inhuman?*

I must stop this, he thought sharply,

I can't keep on like this. It's getting worse. His conditioning, never good, seemed to have crumbled into a welter of neuroses. His atavism was growing from day to day. Delta was becoming concerned about him, he knew. Delta with her perfect integration, her perfect acceptance of the automata. He must not alarm Delta. Above all, he must bind her to him forever. On that depended the whole structure of his future life.

With an effort, he turned again to his work. Carefully, he x'd out the last paragraph on the page in the thinkwriter and began again.

"With the development of the first true robots in the first decade of the Twenty-first Century, life eased for humanity. For the first time in human history, the load of everyday drudgery on which a materialistic civilization must be built was removed from the shoulders of men. Art and science progressed apace, and it was natural that the science of cybernetics, too, should advance to heights undreamed of by scientists of the Post-Einsteinian Age. The true android—prototype of the present-day automaton—was now a distinct possibility.

"But there were unforeseen complications. Man had succeeded in making himself a leisure class in his own culture. Now the culture was usurped. Never forcibly, for the androids were incapable of violence against their creators. But man had made himself unnecessary, and the inevitable result was a severe drop in the human birth rate that continues even today and will eventually make the human animal extinct.

"There were men who recognized this trend and chose to resist it. The bitter antirobotism of the late Twenty-first Century resulted. Actual wars were fought—passively, yet with the secret bitterness of vendettas.

"These wars—man lost. Humanity as a whole had never chosen to resist the advance of the machine, indeed, it had encouraged it. And thus the Crêches were established to equate socially human beings and selected class one automata. These are the leaders of our present-day symbiotic robo-human culture. As matters now stand, a product of the Crêche may not know—or care to know—whether he is automaton or human being. ."

That, thought Gregor with conscious superiority, wasn't strictly true. A human being could generally tell what he and the ones near him were. There was some sixth sense that seemed to warn *him,* at least. And some automata knew what they were and didn't mind it in the least. It was said that the androids were effectually the *homo superior* that scientists had speculated upon for so many centuries. Gregor's lip curled at the thought.

The thinkwriter began again: *"Inconceiveable as it would be to men of an earlier age, our present culture is built on the prop of the so-called indistinguishability of creatures of flesh and blood and creatures of plastic and subatomics. This myth of indistinguishability is inculcated in both man and machine by the Crêche, so that waning humanity and rising machine can live together in amity and . even in love. ."*

The Censors would never pass that, either. Gregor knew he was writing badly, but he went on, purging himself of the thoughts that flashed into his mind with kaleidoscopic rapidity.

"Each class that emerges now from the Crêche contains fewer humans. Our birth-rate falls to almost nothing. Crêche training has conditioned humanity against individual breeding, and the family, long the basis of human relationships, is gone. Marriage is unknown, a savage ritual of the past, no longer countenanced among men—or androids—of the Twenty-third Century."

Gregor clenched his fists tightly. The machine on the table began to cluck faster

and faster, filling the firelit room with its threnodic staccato.

"Man, once master of all he surveyed, is master no longer. He has become an emasculated minority in a world no longer human. The world . . . is no longer human no longer humah no longer. ."

Gregor ripped the helmet from his head and dropped it to the floor. It lay at his feet, rolling slowly back and forth. He knew he could write no more this night, and what he had written must be destroyed. It was worthless. Worse than worthless. It was true.

A gliding, efficient shadow was at his side, retrieving the fallen helmet and placing it quietly on the table beside him.

"Can I get something for you, sir?"

Gregor glared at Roberts. "Get out!"

"Yes, sir."

"Get out!" screamed Gregor.

The automaton bowed slightly and left the room. Gregor stared after him, shaken by the sudden force of his own fury. It frightened him and pleased him at the same time. It was good to feel rage. It was good to know animal emotions, to feel the blood pounding in his temples. It was good to be alive—*really* alive in this forest of simulacra.

HE WAS still sitting before the fire when the sound of Mira's roboplane vanished into the night. The doorway to the terrace dilated and Delta stepped through into the study.

She stood near the mantel, the soft symmetry of her body outlined by the firelight. Gregor watched her. The dancing glow struck shards of warm light from the gems in her hair; it caressed her faintly sensuous features. Gregor felt a stirring of hope. She would understand. She was emotional enough—*human* enough—to understand his overwhelming need for her.

"Gregor, my dear, I thought I heard you shouting." She smiled at him, faintly quizzical, faintly perturbed. "Did Roberts upset you?"

Gregor rose and crossed the dim room to her side. "It was nothing," he said. For a moment he looked down into her upturned face.

"Delta—"

"Yes?"

Gregor turned away from her. It was difficult to put into words the awful thing he was contemplating asking of her. He went to the window and stared out into the night.

"Delta, I want a child," he said abruptly.

"A—child?" She could not hide the sudden revulsion in her voice. *"A flesh-child?"*

Gregor whirled to face her, pain on his face. "Delta—please!"

Delta stood before the leaping flames, not moving. Gregor could see that the conditioned disgust she was feeling—the result of Crêche training—was having a physical effect on her. She looked actually ill. Gregor stared at her, searching her face for some sign of agreement, of understanding. He saw none. And what he did see sent an illogical tremor of fear through him. It was—*pity.*

"Delta! Don't look like that!" he said thickly. "But listen to me for just a moment, I beg you—"

He found himself floundering, at a loss for words. He had never imagined that it would be so difficult.

"I want a child, Delta. A real person. A human person that will be part of both of us. I—I'm afraid of what's happening to us, Delta, truly afraid. Try to understand me. ." He broke off helplessly. How could he explain to her that he felt his very humanity slipping away from him, escaping into some darkling world of the future where man would not, could not exist?

Delta's voice was very, very soft when

(Continued on page 128)

At seven o'clock that morning, five minutes dropped out of the universe—and Will Henning, a little man with a big ambition, began the trail that led to the thing his soul longed for—the dread immortality of—

A BIT of FOREVER

By WALT SHELDON

CIRCULAR. No ending. The end is the beginning: where it stops is where this starts.

You will see what I mean.

In time, in human chronology, that is, there must be a start, I suppose. Let us make it the morning of November 29th, 1965. I was in bed. I was in half-sleep, the state just before wakefulness. *Something* had happened back there in the dream-plane, I was thinking. *Something.* But the more I tried to bring it back, the further it receded.

I shook my head, blinked. I was sitting up in bed now. I stared at the clock—an electric alarm clock in a brown case, modern and ordinary like everything else in the small apartment.

It was a quarter past seven.

Oh, yes, a quarter past seven and it must be morning because there, outside, on Walnut Street, is the sound of a trolley going by, and this is Philadelphia, mid-twentieth century, and soon the city will come to life, and—

Holy smoke.

This was Monday. I started a week of the day shift today and should be at work at eight. Couldn't make a good impression on Grosbeck, the managing editor, by being late; and that good impression was vital to my plans.

I lurched from bed, staggered across the room, started coffee, grabbed a toothbrush, pants, shirt, tie—all the rest. It was twelve of eight when I grabbed a taxi on Walnut Street. The driver was uncommunicative. Hardly knowing I was with him, he got me to the Herald Building in seven minutes flat.

I was fully awake now; I'd already forgotten the strange feeling that in sleep, in the night, I'd been somewhere . . . done something. I was just Will Henning, plainest of men. Five-eleven, medium weight, an open face with all the corners rounded off. I look plain, and talk plain. I cultivate all this because it is a thing

● **There was a vast plain which had no substance. . . . Yet I walked on it, toward a horizon which came no nearer. . . .**

that makes for success among people and it's going to help me own the *Philadelphia Herald*—or its equivalent—some day, by golly. Shooting high? Maybe. But I was just turning twenty in the Depression of '55 and security means a lot to me. If our whole civilization was steadier I'd be content in my job—reporter, seventy-five bucks a week—yes, if I knew that it would go on forever that way. But the way things are—

Well, anyway, that morning it was oddly quiet in the city room. People were in place—the rewrite men at their back-to-back desks in the center, the boys hunched over the rim at the near end, Josie, the copy girl, taking some pencils to the sharpener, and in the far corner old Spike Frayne scribbling his obits in pencil—he hated typewriters. But it was so quiet, so queerly quiet. Even with the teletypes clacking in the wire room, and the varitypers going in the room next to the facsimile receiver, it was somehow quiet.

Then I saw that Grosbeck's office door was open, and that Grosbeck stood there, staring at me. I checked the big clock. Three of eight. I wasn't late, yet, so that wasn't why he was staring.

"Will!" he called across the room, and beckoned.

I went to him. Eyes followed me; I wondered why. I looked at Grosbeck. A small, grayish man with an economical frame and a look of neatness, even in his shirt-sleeves.

He said, "Well, it's the big story today. It's crowding out crime and Washington and the international scene and all the divorces in Hollywood. Before it's over we may have to yank everything but the funnies."

"What for?" I asked.

"Don't you know? Didn't you feel it?"

"Mr. Grosbeck," I said, "I don't know what in the hell you're talking about."

He gave me the look he usually uses on suburban clubwomen who want the minutes of their last meeting printed on the front page. "The Time Drop," he said. "The thing that happened at seven. Where were you?"

"Oh." I grinned. "I was asleep at seven." Then I was sorry immediately I'd admitted it. After all, my present strategy was to keep a good impression active with Grosbeck, and everybody else over me. Hew to the line, that was my motto. Nothing like old Spike Frayne over in the corner there, who had been a pretty good reporter in his day but who couldn't resist letting his flair for poetry creep into factual newspaper stories. He'd published a few volumes of verse on the side—not bad stuff at all. But look at him, now: living on his salary and seniority and doomed whenever the next economic shakeup came along. None of that insecurity for me. I was building something a little more permanent—

"At seven o'clock this morning," Grosbeck said flatly, "the world lost five minutes."

"Hm? The world what?"

He said, "Come into the office."

INSIDE, he sat, leaned across the desk and started his explanation in careful, measured phrases. I listened, and the meaning of the thing came over me at first in a slow, cold wash. I couldn't really start believing it, even as I heard it.

"I was listening for a newscast at seven," he said. "My wife was boiling an egg. There was a slight jar—a soft bump—an *inner* feeling—don't know quite how to describe it. Then I noticed that the announcer on the air was all confused. I looked at my watch. It was five minutes later. My wife boiled the egg for another five minutes, and it came out hard as rubber. While I was still wondering about it the boys from the night shift called. Reports were coming in—from all over the world. Crazy reports. Everyone on the

paper had felt the thing, and apparently, so had every other human. Seven A.M. here, five-fifty-three P.M. in Calcutta, two P.M. in Alexandria, one A.M. in Zurich. All over. Riots are starting in Calcutta. Evangelists in Los Angeles are cleaning up from the contributions of repentant souls. The world, somewhere, has lost five minutes in this—this Time Drop!"

I stared back, still trying to grasp it all. I repeated the words, "Time Drop—"

"It's a blanket assignment for you, Will," said Grosbeck. "Right up your alley, with your engineering degree. More or less, anyway. But the point is I don't want poetry or personal touches or human interest on this thing: I want *facts,* raw and naked facts. I know I can trust you not to go wild on it."

"Sure. Okay." I nodded absentmindedly. My mind was 'way off in the future already. I was beginning to sense the size of this story—and the results of breaking it. By golly, I'd win at least a Pulitzer Prize. Be almost a big shot, then. People would listen. I could start things. I could start worming my way into the power circles, into the big security, into the kind of thing that lasts more nearly forever than a stodgy, salaried job—

"Get going," said Grosbeck, "and keep your expense account within reason."

I got. The first thing I did was read every word of all the reports—and they were still coming in. The Time Drop. Either that phrase had occurred to others, or everybody had picked it up from one of our wire dispatches. Anyhow, they were all using it. And everybody awake or conscious at that point in time—seven A. M. Eastern—had noticed it. The President was going to make a television statement that afternoon. The Bishop of Pennsylvania was cautiously admitting that Divine displeasure might have something to do with it. The head of the physics department at Cal Tech said he needed more time to investigate before he could give an opinion. Scientists at Los Alamos said no, absolutely no, they hadn't detonated any queer bombs and neither, to their knowledge, had anybody else. A senator said it it was all a trick of the Russians. The Russians said it was our fault.

The day went on, and I read and read. I needed some kind of clue, some leitmotif or other to start on. And I couldn't waste too much time, either, because everybody from the F.B.I. to private agencies was working on this thing and might crack it first. If that happened it would be my perfect opportunity gone to waste. I studied and studied and later in the afternoon I pored over the first editions coming off the fax receiver in the morgue. Something, sooner or later, would hit me—possibly even something abstruse or poetic would get me started. Poetic. I thought of old Spike Frayne, and glanced at him there in the corner—old Spike, fiftyish, thin as King Tut, his skin dark as old oak. Working slowly and softly. He actually enjoyed writing obituaries. I shrugged and looked away again.

Nothing hit me that day. Or the next. Or the rest of the week. I began to get a hollow feeling of desperation. And meanwhile the world was still talking about the Time Drop. There were rallies and prayer meetings and half-holidays, and there were wide, frightened eyes and glances at the sky. There was looting. There were also fugitives giving themselves up against the day of Judgment. I absorbed every written word about the Time Drop I could find, and I interviewed everybody who might have a connection with such a thing. I interviewed all the scientists at all the universities, every preacher in town and even some crackpot fortune tellers and soothsayers. With no result.

The traditional wonder period of nine days elapsed, and, conventionally, everybody began to be less interested in the Time Drop. I avoided Grosbeck: I was afraid he'd sigh and yank me from the

assignment and tell me to forget it—and I didn't want to let the thing go this easily. Not my big opportunity; not my one crack at a hunk of eternity to be mine, all mine. . . .

I don't know how I happened to wander over to Spike Frayne's desk that day two weeks later. I won't say a cantankerous higher power guided my steps—I won't come right out and *say* that.

Anyway, there I was, and there was Spike, swiveling his chair around slowly and looking up from his precious necrologisms. Smiling. He had an eternal, universal, truth-of-very-truth sort of smile. The rest of us always joked about it because inside it made us uncomfortable.

"I was wondering," Spike said, in his hushed dry voice, "when you'd get around to coming to me."

I said, "Oh?"

He moved back and forth in his swivel chair so that it seemed to float. Strange fellow, Spike: he'd never really been happy until they'd shoved him into obits. And his death reports were often rather wonderful. They were sometimes sweet, melancholy things with all of Spike's feeling for poetry in them—on any other subject, any more noticeable subject, his writing would have won prizes. He looked at me now and said, "During the Time Drop, Will, there was not a single death."

"What?" I felt a poking of interest.

"More than that," said Spike, "there was for the doomed, reprieve—no death at all."

"I don't get you, Spike."

"Here. Look." He took a sheaf of yellow paper from the desk; it was covered with his soft-pencil scrawl. "The obituary of Stephen Luks. I've had it ready for many weeks. He was bound to die. That fact had already been formed somewhere in the dust clouds of space. As the sun rose that morning—November 29th—Stephen Luks ought to have died."

I looked at the copy:

Science could do nothing for a great scientist this marning. Stephen Luks died on the operating table at Harwood General Hospital after a lifelong illness and an operation he himself had called for. He was sixty-one years old and since birth had lived with an extraordinarily rare disease, aplastic anemia. The operation was a new, untried technique of marrow grafting —the disease reduces the output of the victim's red corpuscles—which doctors called "ninety-nine percent hopeless."

Luks was the originator of the "Q" theory, linking time and gravitation with the binding force of the universe, and quanta absorption. His work had been praised by the very scientists who at times scoffed at Stephen Luks because he had very little formal education, and no degrees.

Luks was born in Baltimore in .

I DIDN'T bother to read the rest. I handed the thing back to Spike and said, "What's so startling?"

"He *didn't* die that morning," said Spike. "I had his obit ready, and he didn't die." His tone implied that a natural law had failed. "He recovered from the operation. He's alive now. Alive and cured."

I shrugged. "So the one percent chance came through."

Spike shook his head. "The operation was begun shortly before seven that morning. At seven sharp they felt the Time Drop. They looked at the patient—he looked different somehow, even though the operation wasn't done. They checked. They took a radionic blood count. He was well. *Somewhere in those lost five minutes he had been cured, without their help.*"

I stared back at Spike for another moment with a widened eye, and then I raced for a phone.

It was Luks himself who answered. He sounded tired. He sounded as if he didn't really want to talk to me, but that nothing mattered much any more. That was my impression. "I'll be willing to talk to you," he said—he had a deep, faintly old-fashioned voice—"but I'm afraid I can't tell you much more than anybody else."

I said, "I'll be right out, Mr. Luks."

Luks lived in a rather ordinary two-story house on a tree-lined residential street. In spite of his world-renowned discoveries he wasn't too well off: his lack of formal education made a university post impossible and there was no way he could fit into industry, and so he lived off a few grants and the trickling sale of his books. He was in a wheelchair; he came to the door that way.

"Hello, Mr. Henning. Come in, please. You'll find things a little upset—my nurse and housekeeper has a day off today."

"That's quite all right, sir." I went in; he swiveled the wheelchair about and I followed him down a short corridor. "Maybe I can do something to help you."

"Thanks—I'm afraid there's not much that can be done." Was there a sad, extra meaning in his words there? I looked at him sharply a little from the side, a little behind. He was leading me to a doorway opening into a room that must have been at one time a garage attached to the house. I could see racks in there with what looked like radio chassis and face-plates fitted to them. There was a long, black linoleum-topped work table littered with parts, test meters, a soldering iron.

I helped get his wheelchair over the threshold and into the room. I noticed that in spite of the age in his face his profile was strong and handsome. His nose was straight, his chin firm, his eyes blue and steady. Upright, he would have been tall. He was clean-shaven. His white hair was combed, and it was the sort of silky, slightly wavy hair that stays well in place.

He glanced at a buffet in the corner of the room and said, "If you'd like a little brandy or wine—"

"No. No, thanks." I didn't want my impatience to get into my voice, but it did just the same. "I'll just—talk."

"Very well." He still seemed to put a little sigh after every phrase he spoke. He wheeled to the work table, pointed to a chair, and I took it and sat, facing him. "Now," he said, "just what is it you want to know?"

"A couple of things, really." I started a cigarette to cover my excitement and eagerness. "First there's your remarkable recovery from that operation—that's a story in itself. And second, there's the Time Drop."

He smiled a little sadly. "The Time Drop," he said.

"You—you know something about it? You have a theory?"

He looked up into the air, still smiling. "Let's say," he murmured, "that I have a suspicion—an inkling—that I don't even dare develop into a theory."

"Oh?" I frowned. I'd have to do something here to get him talking; loosen him up. Maybe start the thing along his own interests; that might be the technique. "Your work—your 'Q' theory, for instance—dealt with the time relationship largely, didn't it?"

He nodded. "You might put it that way. Actually any examination of the physical nature of things must deal with time, because it is a dimension. A physical thing, by definition, has dimensions. We control, easily enough, the rate of change in all the other dimensions, but that of time seemed constant to humanity for many years because of the universal attunement of the time sense."

(I'd done the right thing now: he was talking: practically soliloquizing.)

He went on. "To change the time rate, then, is actually a matter of changing the sensory perception. Do you follow?"

"Well, yes—" I said.

Now he glanced across the work table and toward the racks. For the first time I noticed that at the end of the racks there was a kind of circular metal platform about three feet in diameter, and this was surrounded by cagelike concave antennae. One or two men could have stood in

the space thus formed. Luks looked at me again and said, "There's an old philosophical saw about a tree falling in a remote forest. The question is: if no one hears it fall—does it make a noise? Ancient philosophers spent much time speculating on this. We thought not long ago that it was wasted time. But was it? In other words, is there a direct, predictable linkage between the sensory and the actual, and can the ratios be mathematically manipulated in the manner of any logical quantities? Can we, for instance, say that if a man hears and sees a tree fall it has, pragmatically, fallen?"

"I see," I said. I didn't see. I wasn't even following too closely. I was wondering if the old duck would really get to something valuable.

"That brings us to time," said Luks. He folded his hands in his lap. "In some common ways we *can* change its rate as far as the individual is concerned. But compare time to movement, now. Both are really expressions of inertia overcome—thus expressions of force, mass, energy, the total, immutable energy which my theory defines as 'Q'. We can change the rate of the forward progression of time. Can we now achieve a minus expression of the same thing—and back time up, reverse it?"

"I don't know," I said, "can we?"

He leaned back. He looked straight into my eyes and said, "I have done it."

"You have? How?"

HE WAVED toward the platform and the antennae. "Briefly, that arrangement you see oscillates at an incredibly high frequency. It can be tuned to resonance with the frequencies of thought, and of life-force itself—which, I suspect now, is the same thing as 'Q'. I have tried animals in it. I fed a dog, then beat him with a rolled-up paper, then placed him on the platform. I reversed his time sense. He cringed at the proper time, then went through the motions of eating. To *my* senses he was merely standing there on the platform. But to *his* senses, he was going backward in time."

My eyes were quite wide, now. "But this—this is wonderful! This is a great thing! When we break the news of this—"

He shook his head.

"You mean you feel it isn't ready to be broken yet?"

"I mean it will never be announced."

"What? But why not? Holy smoke, Mr. Luks—you've got all kinds of possibilities here. It may be the beginning of actual time travel—into the far past. I mean, that's what it actually is."

He said very slowly then, "I've come too close."

"Too close? Too close to what?" I got up and walked over to his apparatus.

"How can I say it?" Luks seemed more than ever to be talking to himself. "Too close to eternity—to truth. Too close to the philosophical 'Q'. Too close to completing the circle which is the *allness* of everything. This is a thing I feel rather than think."

He sounded like some of old Spike Frayne's recondite poetry now. All things might be linked in one vast circle, as he was saying, but I still thought of poetry and science as pretty far apart. I leaned around the platform and the antennae, and on the racks picked out what seemed to be activating switches and control dials and verniers—most of it vaguely familiar because of my engineering training.

"Mr. Luks," I said, "how can a man like you—a scientist, a man of real intelligence—talk that way?"

He did glance at me this time. He half-shrugged. "Something happened to me, I suppose. That day in the hospital. I can't describe it. I was under anaesthesia, of course, so I remember nothing of this Time Drop that caused such a sensation. But I know that during it I was cured—they never did finish the marrow graft.

And, without really remembering, I still feel in my bones that in that time I went somewhere, did something, saw and knew something. Something beyond knowledge and awareness; something all-embracing and circular and eternal.

"Whatever happened to me then was something of a warning. It was as if a great power leaned down from the stars and shook its finger at me. I am not ashamed to think this way."

I didn't answer. Didn't want to hurt his feelings. But frankly it all seemed pretty mystical to me—doubly so coming from a man like Luks. I moved to the control rack by the machine and said, "I see you have this dial and vernier marked off in days, hours and minutes. And this one months and years. Is this your time control?"

"Yes," he said wearily. "But forget it. Forget you saw it today. In a way, I'm glad you came. I think your coming here jelled my decision. I think I will begin destroying it today."

"And this is a speed control?" I continued. I was keeping my voice very casual. It wouldn't do for Luks to guess my plan—the plan I was mighty proud of because it showed me to be a determined fellow and a pretty astute reporter. There was one way to find out for certain about the Time Drop—that was to go back to it. Which I fully meant to do. If only in my own senses, I would go back to it. I said, "I suppose that the subject automatically returns to his regular sense of the present when the machine is turned off. That's how he gets back, eh?"

"You might describe it that way," said Luks. "But I must ask you—I must insist that you report nothing of this machine. I trust I can rely on your ethics to that extent."

"Oh, certainly," I said. I'd found the rate-of-travel control, now; a sliding knob that probably worked a rheostat behind the panel. Casually, I set it to its highest speed. No use wasting time on this thing. No use wasting ethics, either, I thought with a smile. Old Spike Frayne, for instance, would have been ethical about this in his legwork days. And where it had it got him? To a far corner of the city room and a pile of death notices. I moved quickly and set the other controls. Seven A.M., November 29th, 1965. Back to the very moment of the Time Drop. And now this big switch on top—the one that could be reached from the platform. I turned to Luks. "Is this the master switch?"

He was swinging his wheelchair around. "Yes—that turns the power on and activates the circuits—"

I smiled all the way. I saw that his eyes were darting over the settings now, reading them—reading where I'd put them. I said, "I'm just trying to do my job, Mr. Luks. I'm on the track of a story."

He shouted: *"No!"* and wheeled toward me.

I stepped to the platform. Still smiling, I put my hand on the master switch. My full speed setting—I hoped—would get me back to the Time Drop before Luks could reach the machine.

"No, Henning! Wait—you don't understand!"

I started to throw the master switch.

"Henning! You've got it at full speed! It vibrates—it shakes—I've never had it that high! Henning—don't!"

I closed the switch. The last thing I remember seeing was Luks forcing himself from the wheelchair and staggering across the room toward me. Falling onto the platform with me just as everything began to vibrate, swim and swirl

THERE was a plain, a vast plain which had no substance under the feet. Yet I walked on it. Toward a horizon—one which came no nearer

(Continued on page 130)

Inheritors of an Earth they could not possess, the pitiful band of humans struggled onward toward the glimmering of life that shone fitfully before them—while Death, incarnate and ageless, stalked inexorably in their track!

No sound came from the Man-Machine, yet its huge feet and legs were blackening.

THE ANCIENT ONES

By HAROLD S. SYKES

CHAPTER ONE

Man and Superman

THE ANCIENT Mighty One sat alone in the immense tower, high above the swirling sand. Angry gusts flung dust against the edifice, then the wind died out and dust devils began to form. They waved slowly in the sky, like dirty, ghostly fingers, and the old, old man shivered as he saw them.

The Ancient, one-time active leader of his conquering race, now spent his years in keeping alive. His skin was almost a fish-belly white, his large head was without vestige of hair and he gasped and

wheezed with every hard-fought breath.

"Four."

It was a mechanical voice from the wall beside his chair. Wearily he reached out to the shelf in front of him and picked from a sterile container a small hypodermic needle attached to a capillary tube which unreeled from the wall.

"Ready. Now."

He flinched as the tiny needle slid beneath his skin. Then he sank back and closed his eyes as the lifeless voice reminded him: "Five in thirty minutes. Also B and C orally."

Had he had his antis for polio again? And had he forgotten his cold preventive? He was sure he had undergone the combo for ten specific germ diseases, but perhaps he had fallen asleep when the time for his anti-viruses had arrived.

This lonely tower room—his self-made prison for the past half century—was as germ-free as any spot on the sick old world could be made. But a tiny leak in the air conditioner might admit any one of a hundred thousand varieties of germs. Perhaps one would be swept unharmed through the filters and barriers of ultra-rays and reach him. That would be fatal, probably.

Almost he felt like giving up. He, of the victorious race, give up? He knew he wouldn't. After another century, perhaps.

ZERKA screamed with rage, for she had barely missed stepping on a large rattlesnake. The scream was a natural reaction, as was her hurried search for a loose stone on the eroded hillside. Presently she found a large one, half-buried, and tugged it loose from the dirt. Her aim was sure and the reptile writhed, bashed and bloody, at her feet. She gave a small cry of satisfaction, then quickly grabbed it up and sped down the dirt path, worn smooth by generations of bare feet.

It was an ill-clothed and hungry-looking crowd of cave people. They were clothed in misfit rags of synthetic fiber and a few wore trunks or robes of old skins. Many wore the hopeless, resigned expressions of those who have fasted too often and too long. Their small tasks were stopped when Zerka hailed them.

Patiently they turned their heads and watched as she waved and leaped nimbly down the hill. Greedily they eyed the snake she held in her fist. A few muttered angrily, for Zerka was young and in better physical condition than most of them.

"Thank you, my child."

The girl turned to confront the speaker, then laughed scornfully as Griff reached out his hand. Her derision was no more than he expected, yet his pale eyes glared. He placed his right hand on the knife in his belt, then muttered and turned away.

"I am not your child!" Zerka spat the words. Then she turned to the others. "We share alike, for we need strength if we are to reach the Big Water. Who else found something?"

"Insects, one lizard, little else," said Altor, a tall, dark-haired young man who wore the plain copper bracelet of subchief on his left arm.

"Altor found the lizard."

"It is little enough," he replied to the voice in the crowd. "But we should be resting, while the cooks prepare a meal with what we have here. Tonight we must start, hunting as we go."

"I shall remain here," Griff announced. "There may be more game next season."

"And maybe less," Altor replied. "Those who go with me will start tonight. Sandstorms will help conceal us from our enemies in the towers. Truly the risks may be great, but it is time to look for food in the Big Water. The Invaders have swept the earth bare of all but a little food. And what the Invaders did not want the Mighty

Ones keep from us, locked in their towers."

Mention of the Mighty Ones was answered by growls from many throats.

"But rest, my people, for tonight we leave."

So began the journey of this little band, scarce half a hundred men, women and children. Following Altor, they left their cave homes soon after the sun had gone down, angrily, it seemed, behind a dust-storm far to the west.

Griff, the troublemaker, and half a dozen adherents watched the band as it wound single-file over the dirt trail to the south. Then Griff led the others in a rush to ransack the caves.

THE ANCIENT Mighty One panted for breath, then his eyes opened and he pressed a button on the arm of his chair. A radarscope slid forward and he peered into it, at first casually and then with sharpened interest.

"Primitives!" he whispered. "A large band of dirty, germ-ridden, ignorant primitives."

Several lights on his commune panel glowed as other Towermen showed interest in his words. He whispered the distant location of the travelers and some of the lights blinked out. The loudspeaker brought no voice asking for more details, yet the Ancient Mighty One chose to watch the string of dots; tiny specks of humanity inching along the illuminated screen. The computer showed their distance to be two miles; then they swung away as they followed the trail.

"Primitives!" he repeated venomously. Then: "Great Ones, rid the earth of these germ carriers!"

A voice came softly through the commune speaker: "Ancient Mighty One, I, Demigor of the South, will deal with them if they come my way. I wait and shall report."

"Seven." Irritatingly another voice, mechanical and dispassionate, had broken in.

"Ready. Now." The Ancient flinched slightly as the needle shot home.

"Vitamins and two number twelves, orally." At this reminder his trembling hand picked out some colored pills from a recess in the wall and conveyed them to his toothless mouth.

"DO THE Mighty Ones see us?" asked Zerka as she walked by Altor's side.

"They know we are moving," he answered. "By magic, perhaps. It is said they can see in all directions, by dark as well as by day. And I have been told they can put to death any living thing within their sight."

"We know they have many great weapons," she said, "but who can say when they may choose to launch them at us?"

"Who can say?" he agreed. "Turn to the right, Zerka, when you see a path. We must reach the river before the sun sees us. I stop here to see that all are following."

Altor counted the shuffling forms on the fingers of both hands. The fifth time he did this he knew no one had dropped out, yet he wondered how some of them found strength to walk at all.

Suddenly, shrilly, a girl or woman screamed. Altor started running alongside the startled column toward the head of the line.

"What is it, the weapon that makes you stand still?" he heard one man ask.

"It may be the Quick Death from a tower," another conjectured. "Or the Sickness that twists into the brain."

"Altor! Help! The Invaders!" There was no doubt it was the desperate voice of Zerka and he raced even faster than before over the starlit stony ground beside the path.

Dimly then he saw Zerka's flailing arms, outlined in monstrous size, for the

huge leechlike Invaders were swarming over her.

He grabbed for her arm, then started slapping the slimy, alien creatures off her until he had her face uncovered, then her forearm.

"Back! Quickly, to open ground," he commanded and half carried, half dragged her away from the insatiable horde. Other hands helped remove the amoeba-like blobs, each as big as a man's closed hand. Beyond, where the girl had encountered them, the ground was an undulating, slithering mass.

Some, dimly seen in the dark, were flowing forward like amoebas, yet they seemed also to bear something of the appearance of loathsome overgrown slugs. Others, the males, were flipping themselves forward like fish out of water, flexing and straightening. And as they moved one past the other and touched, each made a sucking sound.

An Invader had no mouth—yet he was all mouth, and with the single, unalterable purpose of devouring everything organic, animal or vegetable, alive or dead. These creatures were misnamed Invaders; they had been brought back as curiosities by an expedition of the Mighty Ones to another planet. In the brief century since their arrival they had devoured most of the animal and vegetable life on the face of the Earth.

The girl's skin was spotted with birthmark-like red areas where the Invaders had clung to her. A few moments more, and nothing could have saved her. As it was, she was forced to rest for a time before she felt strong enough to resume the journey.

"We must go around them," Altor said. "We are yet far from the river."

"But in the dark—" someone protested.

"Tarn. Eldos. You are carrying the poles used for catching food from the water. You go ahead and tap them on the ground in front of you. We must go on."

TARN and Eldos placed themselves at the head of the line and gingerly felt their way in the dark. Several times they made contact with the dread aliens and additional detours were necessary.

By the position of the stars Altor knew the time of darkness was more than half gone when the column finally swung back into the river trail, the Invaders behind them. Slowly yet steadily they traveled for several miles, when Altor, in the lead, glimpsed a vague form silhouetted on a rise of ground. As he peered at the figure it moved toward them, slowly, purposefully.

"Stop," he softly commanded his people. "It is a Man-Machine, sent out by a Mighty One. It may be hunting us."

All primitives knew what to do when a robot hunter was after them. They scattered silently in the dark, crouching low so that they could see the head and shoulders of the huge mechanism outlined against the sky.

It stopped in its stride and turned questingly, for tiny sounds were coming from all directions. Through the years the primitives had learned the hard way that most robots of the tower dwellers were indefatigable hunters and stalkers; machines with the fixed purpose of collecting living organisms for the laboratories of the Mighty Ones. The hunter robot had steel fingers like talons, to clutch an animal and not let go until so commanded by its master.

Dwellers in the towers would not venture forth under any conditions; they were in mortal dread of bacteria and viruses. Their science had kept germs from attacking them for so long that they had lost all natural immunization.

So the Mighty Ones kept to their chosen places, each removed from the other for additional safety. Because they required

certain organic substances from time to time, they had devised the hunting robots to pursue and catch specimens from the world's fast-dwindling supply of living creatures. Fixity of purpose was impressed on the mechanical mind by the characteristic sounds made by the quarry they were ordered to hunt.

Altor, Zerka and the other adults knew this. As soon as they had formed in a large ring around the robot they set about trying to discover what kind of animal the thing was after. The chirp of a cricket sounded, startlingly lifelike. The robot did not move.

Other insects and animals were imitated by various members of the band. Still the gleaming metal figure did not stir. Altor was sure a Mighty One must be dwelling in a tower not a great distance away, and now he became more certain the robot had been sent out to hunt them down. If only no other Man-Machines were near they might, just possibly, have a chance to destroy it.

It would be a battle to the death, either way.

"It hunts us tonight, my people," Altor said softly.

Instantly the mechanism wheeled toward him.

"Prepare yourselves, my people," Altor called. "We all know what we must do."

The giant was striding forward, ten feet at a step. Altor crouched and retreated and was feeling for a large stone when another man called, then another, around the circle. The robot altered its course to the right with each new voice, for every one was pitched at the same level as Altor's. Eerily the kneecaps of the giant glowed with the faint radiance of black light as it sought for stepping places between the rocks. Talon-like hands were reaching forward and its pyramid-shaped head rapidly twisted back and forth, better to locate the direction of the sounds.

ALTOR, followed by Zerka and other able-bodied ones, closed in from behind as the robot veered in its course. Holding their breaths, they leaped over the stony soil and each one clutched a boulder as large as could be thrown with accuracy.

Altor gasped for breath as he swung his huge rock. He was within five paces of the monster and he aimed for the back of the head. The robot staggered with the impact—almost went down as other rocks hammered its back and legs, then turned ponderously to meet the sudden attack.

Just then a baby cried, shrilly, insistently. The infant's mother frantically sought to muffle the wail as the giant wheeled again and made straight for her and her child.

Women began to shout, trying to divert the course of the murderous machine. But overanxiety spoiled the plan. Too many called and the robot kept straight on.

Zerka, with quick presence of mind, had sprung forward at the first wail of the baby. She tripped over an unseen obstacle and fell to the ground, almost beside the gigantic hunter. Its heavy foot, in positioning for the turn, struck her in the side with such force that she rolled completely over. Instinctively, Zerka snatched the small knife from her belt and stabbed up at the light recessed in the kneecap. There was a sudden flash and she twisted away, jumped to her feet and sped like an arrow toward the crying baby.

Altor had seen the flash as Zerka broke the eye tube in the right knee. Perhaps the thing was now partly blind on that side. There might be a chance to overcome it by planning their attack accordingly.

He leaped after the robot, dodged in front and shouted tauntingly. It did not veer from its course; it was after the baby and would not heed other sounds. Though somewhat ponderous in its movements the Man-Machine would pursue its quarry

tirelessly—for days if necessary. No one among them could outrun it in the dark while carrying the child.

"Men! Let us fight!" Altor shouted. "On its right side!"

Fleet-footed Zerka had snatched the wailing infant from its despairing mother's arms and was running as she had never run before. Yet she sensed rather than saw that the robot was moving as fast as she did. She ran in a straight line, knowing the thing would follow every turn she made and gain a little as it cut across every angle.

All adults without children had followed, though undecided until Altor called to them. Now each primitive grabbed up rocks, raced forward and flung them at the thing's right leg.

Once it stumbled, almost toppled over, but put out its arms and heaved itself to its feet again. With wild cries the attackers ran almost alongside and heaved rocks, even boulders. As the robot regained its footing it waved its right arm and two of the men, nearer than the rest, were knocked a dozen feet by the terrific blow.

Desperately, now that it was stopped momentarily, the attackers threw more missiles at the damaged knee. After furious seconds the joint began to bend inward; the robot stumbled as it started forward, and after several erratic steps it lost its balance and came crashing down. Then they were upon it, pounding it flat, dodging the backward-reaching arms, each as strong and merciless as a hydraulic press.

When finally it moved no more, the men gave one mighty shout of victory. Then they were still, for no one knew what other terrible secrets the darkness held.

After a very brief rest, while the clan was collecting, Altor urged them on. Some protested.

"We must go now," he said. "Other Man-Machines may be hunting us, even now. But one day we shall come back here, and we shall go to all the other towers and make war on the Mighty Ones. The Mighty Ones must die!"

Brave words; but some of the older people wondered how they, with their primitive weapons, might ever hope to wage a successful war against the unseen masters of the Man-Machines.

CHAPTER TWO

The Demon Wind

THE SKY was growing lighter by slow degrees as the weary travelers reached the river. There they drank of the muddy water without waiting for it to be put aside in earthen jars to settle. They rested for a time, then some searched for roots, insects, anything to stay their hunger. As the hot sun rose, some lizards were picked off the rocks and all shared in a meager lunch.

From the top of the river bank Altor had sighted a tower far to the west and another to the east. All were cautioned to keep out of sight of the towers. Even so, the young leader grew uneasy for the safety of his band and by midday they were following down the left bank of the chocolate-colored stream as it meandered in a southerly direction.

A hot wind began to blow in their faces as they advanced. It grew stronger, lifting dust and sand in swirls. Though used to great hardships from their earliest recollections, the children began to complain as they coughed and choked. Still Altor urged them on.

Zerka finally remonstrated with him.

"Altor, you are being too severe. Do the young mothers wish to reach the Great Sea if they must cast aside the bodies of their young to do it?"

"We rest then, but only briefly," said Altor. "Truly, Zerka, your words are

harsher than the dangers of the journey and more numerous than the stones on the hillside." But he smiled as he spoke, and she knew he was not angry with her

The wind grew stronger until the sky was filled with countless millions of particles of the denuded, dying world; the sun was blotted out and terror whipped across the land.

They cowered beneath the bank of an erosion gully, trying to breathe through the cloth garments they had, moving from time to time as the red dust and sand began to bury them.

All their lives they had lived through these frequent storms, for the ravaged Earth continued to complain of the indignities inflicted upon it by mankind and more lately by the Invaders.

As the storm subsided toward sundown Altor led them on, looking for a more suitable place to provide rest, and, if possible, food.

Suddenly they saw Tarn and Eldos, who had been sent out as an advance guard, running back toward them. They all stopped and waited.

"Green! Green!" Tarn gasped as he reached Altor. "More than I would believe at first. The Invaders have not yet been there!"

"And tracks of animals, truly I say it," Eldos spoke. "Come on and see."

This news gave new hope to the weary band; they pressed on with increased speed. On rounding a turn in the riverbank they beheld a swamp-like side valley, covered with bushes, grass and weeds. There were even a few small trees.

Zerka ran forward and began to pull up handfuls of grass and toss them in the breeze. No member of the band had ever seen so large an expanse of growing vegetation. Though they usually dwelled in caves, the safest cavern in the world would not have pleased them one-half so well as this miraculous oasis.

Tarn was the craftiest hunter of them all. Under his direction the adults and older children worked with renewed energy, cautiously surrounding the area. Then, upon his signal they began to move forward, ready with rocks and spears. To them the kill was astounding, with rodents and birds sufficient for several meals.

Some strange and apparently ferocious larger game escaped them. This they resolved to capture the following day.

ALTOR waked with renewed energy the following morning. But mistrust filled his mind when he discovered Griff and his companions in camp. For Griff was a born troublemaker and jealous of the subchief.

"Griff, and you others, do you decide now to travel with us?" Altor asked.

"For a time, if it suits our fancy," Griff replied. He had started a tiny fire of dead branches and was busy preparing a rabbit to cook. When he recognized it as one of those they had captured the night before, Altor felt raw anger surge through his veins. His fists clenched as he thought of how Griff took the best food as a matter of course, disregarding the greater need of the ill, the weak and the children.

Altor was fully prepared to make more of the incident, but just then one of the older boys sped into camp with news that Tarn had located the strange beasts and was watching them. Quickly the hunt was organized. This time some of the men took short ropes from their possessions and prepared loops for snaring the game.

With infinite caution the group formed a circle about the place indicated by Tarn. Then they began to close in. Peculiar grunts were heard, coming from the thicket Tarn was watching; a moment later a dozen wild hogs scampered out. They paused for an instant, then charged full speed at the line of hunters.

Two of the pugnacious little beasts were slain, but only after a struggle. The others escaped, leaving men and women

with bruised shins and a few leg wounds, made by the vicious tusks.

So mid-morning found the camp making preparations for another meal. It was the sensible thing to do. Accustomed as they were to long periods of want with all too few times of plenty, the primitives would not have considered anything else. And now they needed strength. Altor and Zerka did manage to get some of the women to work, cutting flesh into strips for drying. This, too, was sensible, for the party had decided to take all the game they could.

The following three days were spent in hunting, eating and sleeping.

"Now we continue to the Big Water," Altor announced.

IT WAS not the Ancient Mighty One now watching the primitives, but a Mighty One who in appearance was very much like him, though perhaps a century younger. He had a vestige of dark hair around the back of his skull and his eyebrows were dark. Yet his hands trembled and a recorded reminder informed him when it was time for hypodermics, pills and the other vital necessities that kept him alive.

The tower room was fitted up very much the same as the abode of the Ancient Mighty One.

He peered into his viewscreen. Finally he reached out one thin arm, touched a button and waited.

The Ancient Mighty One wakened from a restless nap to hear the commune chime sounding.

"Yes?" he whispered querulously. His viewscreen lit up and revealed a familiar face, almost as aged as his own. Then the man spoke:

"Most revered uncle, days ago you broadcast an order that we report on the progress of a stray band of primitives. And I, Kulan, have called to tell you that even now these savages are near my tower. Truly they make a long journey."

"They carry germs and all manner of disease on their bodies, nephew. You will destroy them."

"Your words are kernels of wisdom, my uncle, and yet there is the very faint chance of retaliation on their part. There are not a great many of us left in our towers, and—"

"Nonsense!" the Ancient One wheezed. "How can they retaliate? Several times in the past I have sent out my robots among them to bring specimens for my laboratory, even though the risk of germs is great. Always the hunter robots were successful." He paused to rest, and his nephew began to speak:

"And have you, venerable uncle, heard from Demigor? He sent one of his mechanicals out several nights ago. It has not returned. He heard its automatic distress call for a few moments, then nothing. He, too, wanted a specimen from this wandering tribe of primitives."

"He made no report to me," the Ancient Mighty One whispered. "Perhaps I was undergoing a treatment at the time." He paused, then continued, "If they are near your tower you can easily destroy them. I have obliterated nomadic tribes in the past and shall continue to do so. In time, if not kept in check, they may grow more numerous and possibly acquire some rudiments of civilization. Then they might be most annoying to us.

"Germ-laden, ignorant primitives a threat, did you say? No more so than Invaders. Bah! Destroy them; need I tell you how?"

And over the entire continent other towermen who had been listening in on the open channel gave thought to the primitives, and also to the problem of the Invaders. Truly the Invaders were a menace to the whole world. Earth would be utter desert ere they had finished. From their landing point in South America they had spread northward, finally crossing

from Alaska to Siberia and now overrunning most of the globe.

Towermen had done nothing to halt the voracious infestation, for they had within their towers almost everything they would need for the next several hundred years. And probably by that time every Mighty One now living would have succumbed to some form of disease. (Provided they cared, or had the courage to live so long.) They no longer died of old age. To them senility was simply a form of disease which they had been able to conquer.

The Mighty Ones were sterile; their last fertile generation had passed into dust more than a thousand years ago. They were the last conquerors; for—discounting the primitives—there were none to succeed them.

Kulan, nephew of the Ancient Mighty One, thought of these things as he waited, hoping the primitives would come a little closer to his tower. The Ancient One was right; this wandering band could hardly be considered a threat. And it would be sport to destroy them, anyway. He smiled sardonically as he checked the automatic alarms that would warn him of the presence of any potentially dangerous germ life. A human being with almost no antibodies could hardly be too careful.

BY THE time preparations had been made to leave the pleasant oasis, the early morning sun began to grow most strangely dim, and Altor noted a saffron tint in the sky, which deepened to a dirty brown color in the south. It blackened as he watched.

"Eldos! Tarn!" Altor called. "Quickly—we must find shelter. The demon wind is coming! You search to the east. Balin and Griff, look for caves to the south, but do not go far. Zerka, we shall hunt for shelter west of here. We meet here before the sun is one hand and thumb higher."

Quickly the searchers melted away in the half-light, as other couples were dispatched toward the intermediate points. The air was oppressively warm. The few babies, usually so indifferent to minor discomforts, were restless and fretful. Mothers cast frightened glances at the lowering sky. They thought of the many they had known who had ceased to live during the unending hours of a demon wind.

"No shelter."

"No shelter."

Altor waited, his face expressionless as he received the same discouraging report from each returning pair. Balin and Griff were the last to report back. The latter said, "No shelter," then sneered, "A good leader would have found shelter before it was needed. A good leader—"

Altor sprang forward, fists clenched and murder in his eye. Zerka reached out a restraining hand and touched his arm. This recalled the subchief's mind to the safety of his tribe, as it had done at other times when his temper seemed to overflow. A moment he stood, he and Griff inches apart, then he turned his back on the other.

"One chance we have. There is a small place not far from the tower," he said, pointing to the west. "The Mighty One living there may have snares set for us, but we must find shelter at once. Come with me."

Many in the crowd were undecided, weighing the terrible danger of the storm against the instinctive and bitterly learned dread of the Mighty Ones.

"Look!"

Zerka screamed the word and pointed to the south. They saw an ebon wall stretching from east to west, with a dirty gray fringe of dust boiling up at its base. The air was breathless where they stood, but by its stillness even more sinister than the sound of fury unleashed.

"Zerka, lead the way. The strong ones shall carry the young. Run!" Now they needed no further urging. They snatched up their meager possessions and ran after

the girl, who was already barely discernible in the forbidding gloom.

Dust swirls enveloped them with increasing frequency as they sped over the uneven ground. And they realized this was only a mild foretaste of what was yet to come. Altor was last, urging them on, helping to their feet those who stumbled and fell.

They were most certainly lost, it seemed to all, before the vanguard made out the dim, squat shape of a structure of some sort. Now the wind quickly mounted in savage fury, throwing sand and gravel in their faces, almost blinding them.

Gasping, staggering, they gathered at last on the north side of the building. The wind screamed around the ends of the inadequate shelter and eddies of dust spun like miniature cyclones.

Altor groped for an opening or some sort of break in the smooth wall. From one end to the other it was solid, without door or window. He dared not venture around to either end now—no one could stand for an instant against the senseless fury of the solid wall of compressed air and earth which rocketed past the corners.

They huddled as best they could against the one unmoving thing in all of screaming nature, blinded, choking.

No one among them heard or could see what suddenly happened. They merely sensed a difference in the innate savagery of the wind; the sound seemed a trifle diminished for an instant before they found themselves sprawled in a struggling heap.

From above, in this utter blackness, solid streams of sand poured down.

The darkness seemed to be less intense, as though some faraway illumination were reaching them indirectly. As they got to their feet they found they were no longer buffeted by the gale.

Suddenly two figures shot down—from the sky it seemed—to land among them. The two were a woman and a boy, both members of the party. Their startling arrival from above helped to make clear what had happened. The ground, whether from an excess weight of sand or because of some structural weakness beneath, had simply caved in, carrying Altor and his people with it.

The youthful leader called out the names of his people, one by one. And they shouted out answers there in the dark, with the wind howling frenziedly above them. All were present and all still alive.

Either because less dust was now pouring down or for some other reason, the faint radiance had increased so that Altor could dimly discern smooth metallic walls on two sides, suggesting a tunnel.

"Stay, but stand to one side of the hole above. I will explore." So saying, Altor turned toward the unseen source of light, whose reflected radiance seemed stronger now, though at some distance. Unbidden but welcome, Zerka walked beside him.

CHAPTER THREE

Tower of Doom

TWO HUNDRED paces brought them to an angle in the big underground conduit. Upon making the turn to the left, followed by another squarely to the right, they found themselves about to enter a large room. It was flooded with a strange bluish light, apparently coming from the entire ceiling.

They paused at the doorway, tense, suspicious. At first glance the room seemed to be empty. Then they beheld four huge robots, motionless against the far wall, but facing toward them. Still were the Man-Machines, yet menacing in their very immobility.

"No light shines from them," Zerka whispered.

The automatons did not move, nor did they seem to hear. Only then was Altor sure that they were not fully alive—would

not be until called into action by one of the Mighty Ones.

Then he knew!

They were in the under part of the tower they had seen. Above them would be one of the towermen, whose perception would be keen, whose terrible weapons were without number and who would strike with no mercy.

Altor motioned forward and they moved softly across the room to a door on the far side. As they neared it the metal slab swung open, an invitation to enter. They jumped back and Altor clutched the handle of his knife. The door closed, to open once more as they came forward again.

"Magic of the Mighty Ones, Altor. If—"

"So it seems," he replied. "Come on, Zerka. Nothing harms us yet. All my life I have wanted to be in one of these places. We may find—who knows what?"

They went slowly through the opening, entering an immense room. Row upon row of shelves met their gaze, each piled high with a far greater variety of things than they knew existed.

At a slight sound Altor whirled. Griff, dirty and disheveled, grinned crookedly, then gestured.

"Altor finds wealth and treasure and tells not his people. I, Griff, take what I want and Altor dares not stop me."

"I stop no one. But we must move with care. This is the tower of a Mighty One. Go back and tell our people of what has been found, that they may join us."

Griff sneered, "And while Griff goes back, then Altor locks the door! I am not caught by your tricks." In his hairy fist he was clutching a club, his accustomed weapon. He raised it and sidled forward, then quickly sidestepped Altor and the girl. So he reached the nearest shelf.

"I go, Altor." Zerka vanished through the door.

Griff, meantime, began to paw through the strange things piled before him, discarding and throwing down what he did not fancy or understand. His eager hand overturned a small apparatus and it crashed to the floor.

"Silence, fool!" Altor hissed. "Must you send an alarm through the tower?"

For answer Griff grabbed up his club and swung viciously. Altor dodged and rushed at him. Then Griff was down on one knee; suddenly he reversed his weapon and with all his strength rammed the handle into Altor's stomach. Altor went down, paralyzed, unable to draw a breath. His head rocked with another blow and brilliant stars exploded into nothingness.

Dimly then, how much later he knew not, he saw Griff with club upraised. Faintly he seemed to hear a scream of terror. Into his clouded sight came a shimmer of metal. As his vision cleared he saw it was one of the mighty robots, towering over them both.

Altor was beginning to get his breath again, in painful small gasps, and he was lurching to his feet when the Man-Machine reached out and picked up Griff. He picked him off the floor by grabbing his left arm, as a child would pick up a doll.

Griff hung limp for a moment, then struggled wildly and sought to use his club. The robot shook him once, twice; and the man dropped his weapon and dangled helplessly. Then he was carried by the mechanical monster down the long room, between the high shelves. Altor watched them leave as a door at the other end silently opened, then closed behind them.

The sound of steps behind him caused Altor to turn. His people were entering the storeroom, led by Zerka. Their footfalls seemed very loud. Then he noticed that the wild fury of the storm was no longer audible; either it had died down or the walls of the building were so thick that it could not be heard.

"Let us be as quiet as possible," he directed. "Many things here I would like to know, but first we must look for what we need—food, clothing, weapons. Then back into the tunnel, where we can make a stand against any who may attack us. When the demon grows smaller we shall leave by way of the hole in the roof."

Quickly they separated, to search the shelves. Such a treasure house it seemed, and so absorbed did they become that they lost all track of time. The men and boys were arming themselves with the more primitive weapons, such as swords, axes and knives (they did not understand the others) while the women were searching for food and clothing above all else.

Altor had opened a big book. He was fascinated with the pictures of wondrous weapons and machines.

Suddenly, then, the people grew still. Altor heard measured, even steps, growing louder as he looked up.

Coming toward them was Griff, walking alone. In his right hand he held a curious metallic something. Altor knew instinctively that the thing was a weapon and that Griff was bent on murder.

The man's eyes were large and round and focused at a distance, giving him the appearance of looking through and beyond them.

Griff stopped five short paces from Altor. He swayed slightly. His face was unnaturally pale and his lips were slack.

The subchief edged closer to the man, slowly, steadily.

Words came slowly, in a thick, blurred speech from Griff:

"Kulan, the Mighty One, sends greetings to his visitors and bids them welcome." He swayed, then suddenly straightened up, as though another mind were commanding his. Slowly he began to raise the curious metallic something in his hand.

Altor's muscles tensed and his eyes measured the distance between them. The leader's people were moving back slowly, uncertain of what was to happen. A child began to cry, softly, the sound muffled against its mother's breast.

"Kulan, the Mighty One, tells Griff to give the primitives what they deserve. Kulan—"

ALTOR sprang, diving low to get under the weapon. His right arm shot up and he was gripping his adversary's wrist, bending it up, even as the force of his plunge carried Griff backward to the floor.

A sinister humming noise broke out, and glittering rays shot up in a cone from the weapon. Where they touched the ceiling, it became incandescent. Then the mysterious half-light was flicked off as Altor broke the other's hold on the firing mechanism.

Several members of Griff's minority faction crowded forward as if they would take a hand in the battle. Others as promptly pushed them back.

Altor struggled desperately and at last managed to wrest the weapon away from Griff, whereupon the latter twisted his head and sank his teeth in the subchief's wrist. With his free hand Altor sent blow after blow into the other's face, until Griff sank back, inert.

"Look!" Zerka called. She pointed up to the metal ceiling. Where the deadly rays had touched, even for an instant, the surface metal was blackening. Yet now it seemed to glow with the light of an inner fire. As they watched many tiny cracks ran across the surface and showing through from within was an alarming redness.

"Outside, my people," called Altor. "To the tunnel and if the demon storm has lessened then take what we have outside. Wait a short time—I go to see the Mighty One!"

He sprang past the motionless Griff and ran the length of the room. The door

scarcely had time to open when he was through and gone. Zerka followed fleetly.

On the other side of the wall a long curving ramp led upward.

"Altor!" she called. "I come with you." He was far around the curve of the spiral, running hard. His pace did not slacken and the girl started after him, when suddenly, from a recess in the wall the gleaming arm of a robot shot out, encircled her waist and picked her from the floor.

HE SAT alone in the immense tower, high above the swirling sand. The wind died down and dust devils began to form. He shivered slightly as he saw them and turned up the room temperature control another degree. He glanced at the clock. Then slowly his fingers reached out and he touched a button. He gasped softly in the silence of the hot room as the unprepossessing countenance of his nephew looked at him.

"Most illustrious Uncle, I trust you are well?" The Ancient was visibly irritated by the mockingly respectful voice.

"What of the primitives?" he wheezed.

Kulan chuckled. "They are within my tower now. I shall have sport with them. With my robots and with one of the more ignorant of their number whom I hypnotized I shall—"

The Ancient Mighty One raised a thin, trembling finger and pointed at his nephew's image.

"Look behind you, you fool!" he said, then sank back in his padded chair.

Kulan gave one startled glance and pressed a button. Swiftly and silently a transparent curtain slid down from above. The room was divided now, sealed in two parts. Then Kulan, the Mighty One and Altor, the primitive, each silently and calmly eyed the other, with the curtain between them.

At last the old man spoke:

"In times past, it amused me to overhear the ignorant chatter of your kind. So I will speak your simple language, as I speak all languages. You are of the decadent rootstock of North America, though you may not know it. You and your miserable band of primitives are of that remnant of Americans who, either by hiding in the fastnesses of the Grand Çanyon of the Colorado or underground, escaped the atomic purge visited upon your nation by my ancestors three thousand years ago.

"And now you, my woefully uneducated 'Altor,' is it? What I shall do to you and your kind I shall do in my own good time. But first I shall tell you some things you do not know and then, when tired of this sport, I shall be happy to assist you to your well-deserved destiny."

The Mighty One leaned back, his hands gripping the arms of his chair, and chuckled softly to himself. From the commune came the words:

"Kill those outlanders now, before it is too late!"

Kulan chose to ignore the voice of the Ancient, and he did not look at his uncle's face on the round screen at his side. He was enjoying himself. Within reach of his fingers were a dozen means of wiping Altor and his people out of existence.

"You, Altor, are a more miserable specimen than the Cro-Magnon, who lived millions of years ago. You probably possess less brute cunning than his. You are not so well adapted to live in this world as he was in his. Truly, I pity you and all the primitives, especially for your ignorance.

"There are secrets in this tower which would civilize your kind—make you, perhaps, masters of the world. The recorded pictures and spoken knowledge contained in my cellars would give you an excellent education in a short time. That is, provided you had the mentality for it."

"You idiot!"

The words came huskily from the commune, and on the viewscreen Altor saw

the incredibly old face of Kulan's uncle, though he knew him not.

Kulan still chose to ignore the Ancient Mighty One; it even seemed he left his commune turned on that he might further exasperate his relative.

Altor stood alert, one hand on his knife handle, the other behind his back. Perhaps he might learn more, so he said:

"Insults are easy for you, who are afraid to venture outside your tower. My people know you by the way you send your Man-Machines after us. We knew not how you came here, but after seeing you I know you could not build this tower. You are but a weakling.

"Even the slimy Invaders take what they want—you cannot take anything by your own efforts. Talk is free. All the wonderful knowledge you say you have stored away may be only a silly dream in your head."

KULAN smiled as would a scientist when a laboratory experiment turns out well. He touched a button and his chair turned away from the video view of his uncle.

"A weakling, am I?" Kulan laughed, then sank back, coughing weakly. He took a capsule from the table and slowly swallowed it. His eyes brightened and he sat up again.

"A weakling in brute strength only. We Mighty Ones rule what there is left of the world. And we rule by pure intellect. You can do nothing in the future, even though our glorious race is dying out. There will be another Ice Age, and yet another before your kind gets beyond the bow and arrow. The very knife you wear in your belt, you found in some ruined city.

"Yet I have it in my power, if I choose, to show you how to begin in the vault at the upper left corner. Even you could learn from simple pictures how to operate the sound and visual records; to select by pictures what you wished to learn of history, mechanics, agriculture—anything! All and a thousand times more than your poor brain could absorb in a lifetime is available in that one room of mine."

"Mighty One, I—bring—girl—and—man."

Altor whirled, to find a huge robot standing at the door by which he had entered. Encompassed within the curve of one huge metal arm was Zerka, half conscious, and with a purpling bruise on the side of her face. The other arm carried Griff, who fought weakly, eyes glazed and with slaver on his lips.

A sinister humming sounded. Lights danced around the feet of the giant, for Altor's hand had whipped out from behind his back and aimed the weapon he had wrested from Griff. He quickly lifted his finger from the trigger, but turned the weapon toward Kulan, even as Zerka was slipping out of the slowly loosening embrace of the robot.

No sound came from the Man-Machine, yet its huge feet and legs were blackening. Then fiery veins became visible and the metal began to soften and bend.

Kulan cried out and half rose from his chair.

"Away! Run away from me!" he croaked.

"I run, O Mighty One." These words came not from the robot but from Griff, who glared wildly an instant. Then he suddenly turned and threw himself at the large crystal window. Its fastenings parted with a snap and the man disappeared in an arc, down and down. The order, intended for the mechanical slave, had sent instead the subject of Kulan's experiment hurtling to his death.

The Man-Machine was turning toward the Mighty One, as an injured dog turns toward its master.

Kulan's scream was weak and trembling. He stood balanced on wasted legs and made a gesture as if commanding the

robot to stop. It lurched, then halted uncertainly.

Kulan clawed at his throat. Altor could hear his rapid breath sounds through the curtain.

The legs of the Man-Machine suddenly collapsed in fiery pools of metal; instantly the transparent screen was a sheet of flame, searing hot for a long moment, then gone.

"Germs! Bacteria! Deadly cold air!" Kulan was fumbling for what may have been some preventive medicine as he continued to mouth the words. The tiny vial fell from his weak fingers and broke on the floor.

"Primitive scum, you die now," the Mighty One whispered as he reached out to touch a button on the wall.

Altor sprang at him, reached him in an instant and sent him spinning across the room. He tried to rise, then sank back, his dark eyes glittering with hate.

Altor looked for Zerka. She was on her feet, walking toward him. They both smiled. He took her hand in his and together they went and stood looking down at the fallen Mighty One.

"Thank you, towerman. Thank you—not for what you have done, but for what you leave us. We, Zerka and I, and my people shall learn of what is in the room of which you spoke. One day we shall be strong in knowledge and many in number over the Earth.

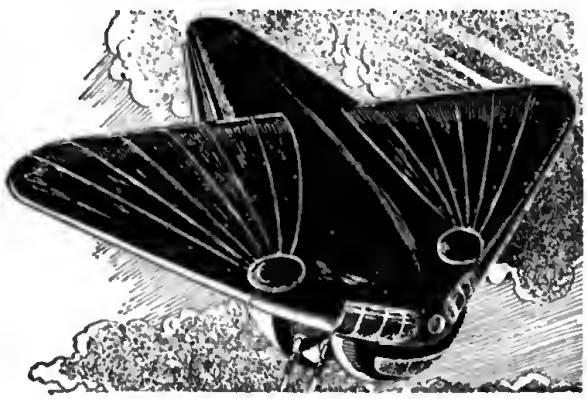
"We learn first how to slay the Invaders. We shall learn, by making grass and plants grow, how to stop the dust storms. We shall be one people again, with food and clothing and shelter for all. But now I send some to the Great Sea for food and over the land. Then all of the tribes shall see and hear and talk as one, with the aid of your magic."

Kulan sneezed. Then he coughed. For a minute more he lay there, fighting for breath.

Altor noticed that the sky was lighter. The storm was all but over. Yet some red dust was carried in through the broken window by the dying wind. Brought by the dying wind, to the dying man it came, sifting over his spare form a film of powder.

"Germs! The smallest kill the greatest who ever lived!" He gasped feebly, shuddered and was still.

HE SAT alone in the immense tower, high above the swirling sand. He sat very, very still, and his wrinkled skin had the whiteness of chalk.



"You are of that remnant of Americans who escaped the atomic purge three thousand years ago. . . ."

"Two."

It was a mechanical voice from the wall beside his chair. Hypodermic number two was there on the table before him, in its sterile container, with a capillary tube which would unreel from the wall. It was conveniently near, yet he did not pick it up.

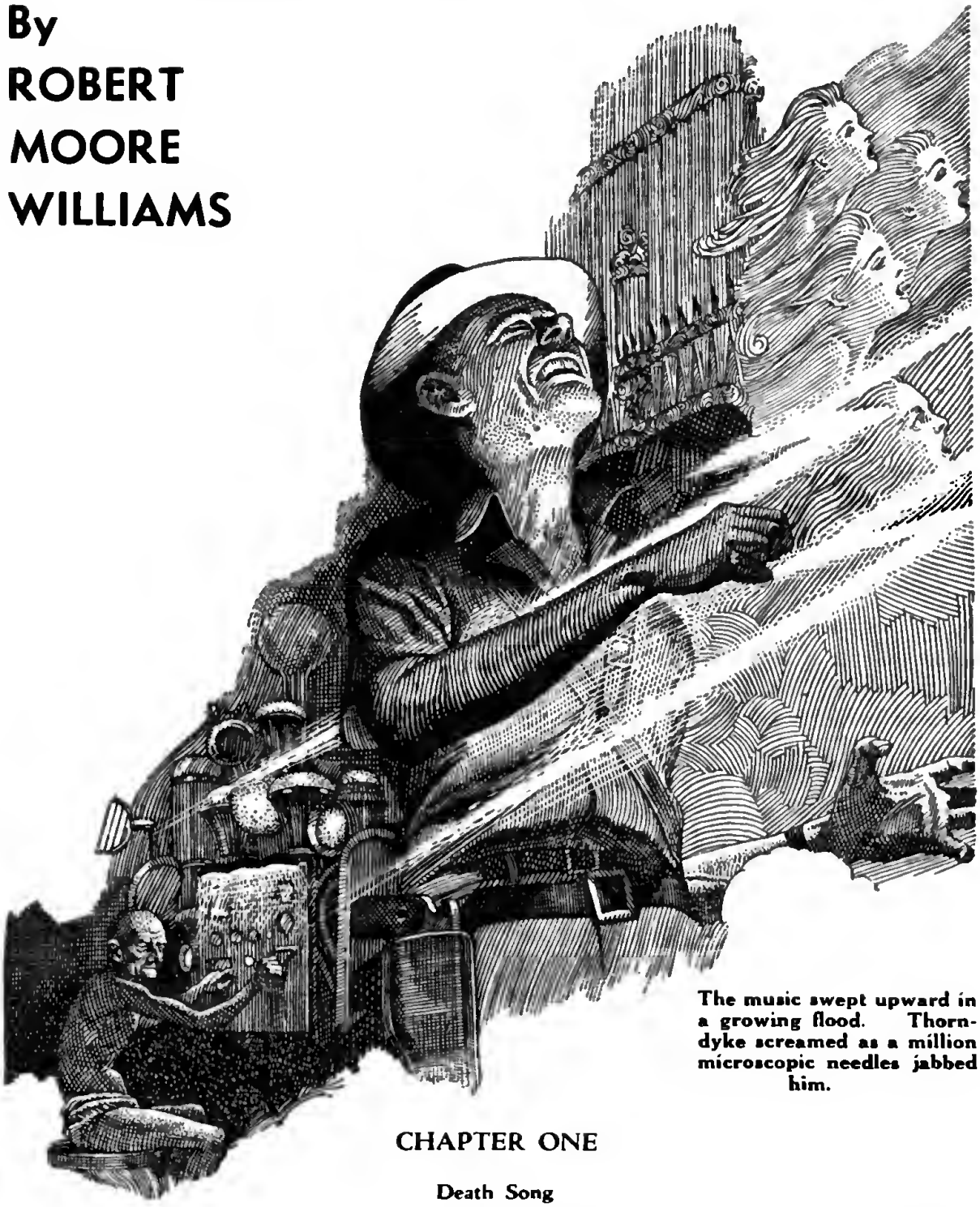
All this Altor and Zerka could see there upon the screen in the room. And they knew not that what they saw was hundreds of miles away. They were looking at the Ancient Mighty One, but could not see out his window.

Outside that faraway window the dust devils began to form again, waving slowly in the sky, like dirty, ghostly fingers. Nor could the old, old man now see them.

And other Men of the Towers listened, and looked, and wondered what to do.

A Novelette of Man's Farthest Future

By ROBERT MOORE WILLIAMS

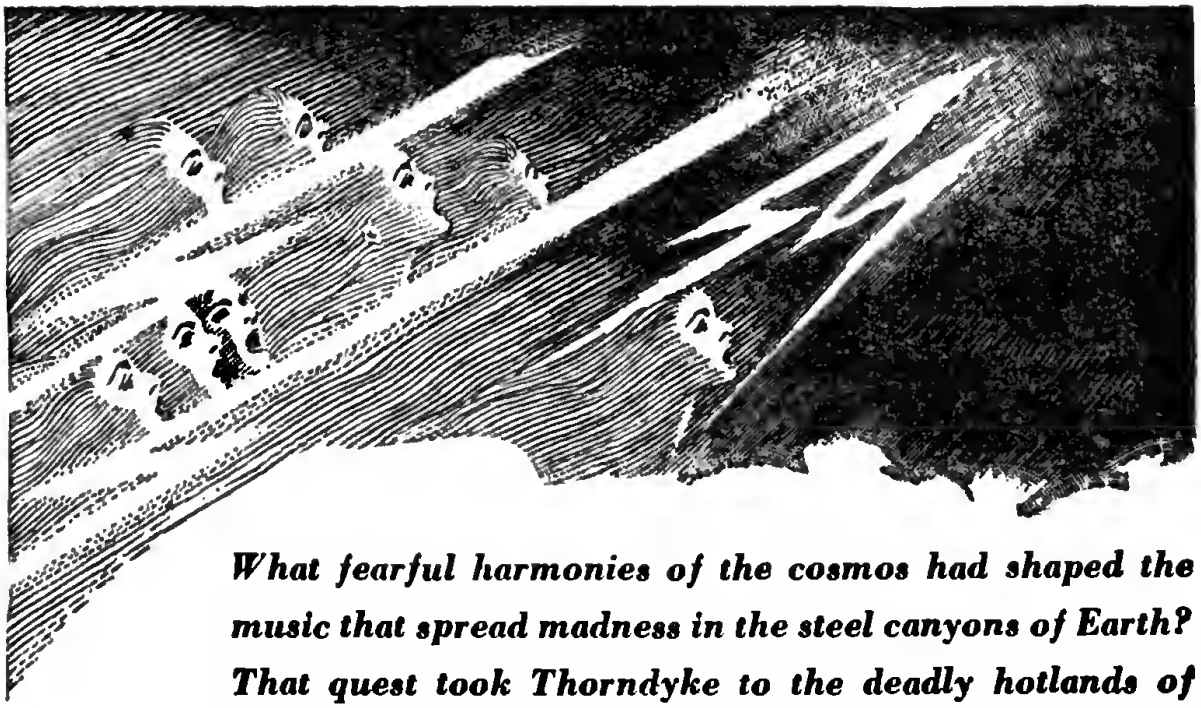


The music swept upward in a growing flood. Thorndyke screamed as a million microscopic needles jabbed him.

CHAPTER ONE

Death Song

THE native Venusian guides, tense and sullen with fear of something they could not or would not name, had come into this region with reluctance. Thorndyke, who had no respect for superstition, was intelligent enough not to browbeat them. He had cajoled them instead with much talk about all the *atjol*, the fiery native drink, they could buy with their wages, and they had gone forward again, moving toward the precipitous mountain region of the hotlands jungle. Then, when it became apparent that their destination was actually



What fearful harmonies of the cosmos had shaped the music that spread madness in the steel canyons of Earth? That quest took Thorndyke to the deadly hotlands of the Veiled Planet, on a journey that stretched before him, beyond his own life—

TO THE END OF TIME

the plateau that they called Kith-kal-sar, the singing mountain, they had taken council together and had decided on a course of action, without telling their employer. The first Thorndyke knew of it was when he awakened in the morning and discovered that the whole safari crew, porters, guides, cooks, and the rest, had vanished in the night.

Thorndyke was short and stubby, gnarled like an oak tree, and although he was actually one of Earth's foremost psychologists, nobody seeing him for the first time ever believed he was anything but a pirate. Timid women had been known to faint at the sight of him. Stronger specimens, on meeting him, invariably reached mentally for a baseball bat or some other weapon, to have handy just in case. He had long since accepted the fact that he was not pretty, and as for the opinion of the female members of the order mammalia, he cared not two hoots what they thought of him. Or what anybody else thought. He was a little universe all in himself, complete with his own natural laws, which he made up as he went along.

Most men, deserted by their guides and helpers in the hotlands, would have started hot-footing it out of there. Thorndyke, operating according to his own peculiar laws, spent five minutes in outraged profanity, then selected a light rifle that threw a bursting charge capable of stopping a garo or a cat lizard, added a kit of

medicines and food, and headed straight toward Kith-kal-sar.

To his mind, the goal he was seeking was sufficiently important to justify the risk. The goal was neither wealth nor fame. It was a song.

Back on Earth, where the song was being played, it was called *Journey to the End of Time*. Though no one on Earth knew how, it was certain that the music had come from Venus, as a recording of a native song. On Earth, it had been brought to the attention of a famous band leader, who had sensed at least part of the possibilities of the piece. The band leader had translated the weird half and quarter tones into notes capable of being produced by human musical instruments. Unquestionably the music had lost much in translation. Unfortunately it still had too much left, all of it bad.

The first effect was sadness. The second was a deep melancholy. The third was—disorientation. It might take the form of murder, insanity, suicide. The first, and last time, the number had been played on the air, over a hundred people died violently. Apparently, any dangerous tendencies already present in the human mind were accentuated by the music.

After one playing, the Department of Health had hastily ordered the number withdrawn from the air. But wire recordings existed and these were being played in clandestine hideouts, in fierce little night clubs, at secret orgies.

The music exploded something in the psyshe; it caused a disease of the mind. Remembering the new diseases that had been brought back from the planets with the first interplanetary vessels, and the rigorous measures that had been necessary then, the U.N. had acted as they would have done if a new extraterrestrial had appeared on Earth, by sending a crew of germ fighters to the origin of the disease to isolate the germ and combat it.

If, lamed in translation, crippled by musical instruments of another world, it still possessed so much power, what might be the effect of the music in the original, as it was played on Venus? This question worried them. There were other fringe questions, though, that worried them even more.

Thorndyke was a member of the team trying to locate the origin of the music. The investigation had been difficult. The Venusian tribes living around the spaceports either did not recognize the music, as played back for them from Earth recordings of Earth instruments, or they were unwilling to admit their knowledge. Rumors and tips had indicated that perhaps here in the hotlands, at the place called Kith-kal-sar, the singing mountain, the source of the music might be found.

As he was crossing the side of a precipitous hill, with pools of swamp water and mud below him, Thorndyke's foot slipped. He tried to catch himself, failed, and went headlong down the hill. With a mighty splash he landed in one of the pools. When he came to the surface, he caught a log that was anchored to the bottom, and seeing what he had aroused on the sandbar across from him, he held onto the log, let himself float, and did not move a muscle. He knew enough about garos, the swamp alligators, to keep still.

His fall into the pool had awakened the garo. If he moved, the vibrations of that movement would be transmitted through the water, the garo would pick them up and come to investigate the juicy tidbit that had fallen into its private cafeteria.

Lifting its head, the garo tried to locate the source of the splash that had aroused it.

Creatures that fell into this pool always splashed as they tried to get out.

Thorndyke did no splashing. Maybe the garo would go back to sleep. Then the human could wiggle, an inch at a time along the log, and float to shore.

And maybe he couldn't.

Alligator bait! he thought bitterly.

The garo knew something strange was in the pool. Under the circumstances, the monster had no intention of going back to sleep. Thorndyke could see the creature raise itself up and look around, trying to see from weak eyes if anything edible was in sight. The garo couldn't see very far or very well. It grunted, inquiringly. Thorndyke didn't grunt back.

THE HOT afternoon was still. Sunlight glinted through an opening in the clouds. Somewhere in the jungle a rain bird shrilled. A dragonfly with iridescent wings a foot long flew across the pool. Thorndyke was aware of sound—somewhere. It came from somewhere on the slope and grew stronger—a swelling chorus of song. Deep bass voices roared a chant until the whole jungle seemed to echo with it.

Listening, Thorndyke felt a sudden, irrational anger surge within him. The lust for battle, the clash of swords on shields, the cry of the victor, the sob of the stricken, all were in this music. Thorndyke felt hate rise in him, hate for the enemy. His heartbeat quickened.

He was dimly aware that he was listening to a song like *Journey to the End of Time* It was a different song, written for a different purpose, but it sprang from the same source. The first effect of this wild music was anger. The second effect was—hallucination. As if his mind were a movie screen and a new film had been spliced into the middle of an old picture, the hallucination hit him.

The pool of swamp water, with the restless garo on the bank, faded instantly. His eyes seemed to disconnect themselves. His mind looked at a new scene. He found himself in a place that he knew did not exist except in his imagination.

He was sitting in a beautiful living room with a picture window across the corner. Through the window he saw a breath-taking vista of snow-capped mountains sweeping away into the distance. He recognized them somehow as the Colorado Rockies. They were so real he could have been willing to swear he was actually looking at them. In his hand was a drink so real he could savor the smokiness of the Scotch, and sitting beside him was a woman. He could not visualize her features clearly but he knew she was very near and very dear to him.

A woman! By this one fact, Thorndyke knew he was dreaming.

While the music swelled in a growing flood, the illusion held. When it died, the illusion vanished. Thorndyke, gulping, saw that he was still holding onto the log. The garo was leaving the sandbar to search the pool for him, but the human was not aware of this fact. His attention was held by what was happening on the hillside.

The music makers were there. They were a group of barrel-chested little men about three feet tall. They looked a lot like pygmies, like the vanished Bushmen of the South African *veld*, almost naked little men with barrel chests. Thorndyke caught glimpses of them scurrying through the trees on the steep slope, their bass voices emitting agonized bellows. He saw why they were running, why they were alarmed.

A human woman was after them. She had in her right hand a slim, supple tree branch, and she was laying about her with all the strength in her arm.

For a second Thorndyke gaped at this astonishing sight, then he became aware again of his own situation and lifted his voice in a yell.

At the sound, the woman dropped the switch and stared around her. She located Thorndyke in the pool.

"Hey, look out, there's a garo in that water!" she shouted.

"Hell, I know it," Thorndyke an-

swered. "If I move, he'll locate me."

"Don't move," the woman shouted. She came down the steep slope in a sure-footed run. Like a monkey, she shinnied up a slender tree growing at the edge of the water. The tree bent under her weight. Splashing her feet in the water, she began shouting to Thorndyke.

"Swim, you idiot, while I draw the garo over here."

The swamp alligator, certain that it had now located the juicy tidbit that had fallen into its pool, headed straight toward her. She jerked her feet out of the water before the ugly snout emerged.

Thorndyke had never had any swimming lessons, but he didn't need any now. Dripping water and mud, he scrambled up the bank. The girl slid down the tree and came toward him.

The expression on her face said that now she had seen him, she regretted cheating a perfectly innocent alligator out of its dinner.

Thorndyke didn't mind her reaction. He was used to it. She had freckles, and brown hair and eyes the color of the skies of Earth. He liked her, instantly. "I can't help how I look," he said. "You can blame it on poor heredity. I'm a throwback to the ape-man." He grinned at her.

Astonishingly, she grinned back.

"Where'd you come from? What are you doing here? Who are you? What were you doing in that pool—fishing?"

"One question at a time," Thorndyke said. He took off his pack, upended it, poured out the water. "I'm Jim Thorndyke."

"I'm Neva August," the girl answered. "My father is a missionary here."

"A what?" Thorndyke said. He never ceased being astonished at the places the missionaries penetrated, but of all the places he expected to find one, the hotlands of Venus came last. He told the girl what he was doing here.

Surprise showed on her face as she listened, then it was replaced by fear.

"The Noro music has reached Earth?" she said. "Then Haswell escaped after all."

"Who is Haswell?"

"He is a prospector, or said he was. He was here with us for a while. He made a recording of some of the Noro music, then disappeared. I didn't know what happened to him but I thought the Noros—" She paused. "They objected to having a recording made of their music and I thought—"

"They had dropped Haswell into the swamp?" Thorndyke asked.

"Well, something like that."

"Who are the Noros?"

"I forgot you do not know them." She looked away, searching the trees on the hillside. Her voice rang out in a series of deep tones.

In response there began to appear around them, hesitant, sullen, staring at Thorndyke with no friendliness whatever, the three-foot pygmies of the hotlands swamp. These were the music makers of Venus.

"They're angry with me," Neva said. "I stopped a war between them. They're both angry and grateful because of that."

"You stopped a war?" Thorndyke asked puzzled. "How?"

"With a switch," she answered. "I know you must be thinking that a war that could be stopped with a switch was not very important, but it was important, to the Noros."

"They don't even have any weapons," Thorndyke said.

"They had the War Song," the girl said. "That was weapon enough."

"Eh?"

She looked thoughtfully at him as if she were trying to estimate how much she could tell him. "Go on," he said. "I'm ready to believe anything. How can a song be a weapon?"

"I don't know, but it is. There were

two bands of Noros and they were going to fight each other with that song and nothing else. When they finished one band or the other would have been dead. I've seen it happen."

"But the song had no effect on you," he said.

"I have learned how to keep from hearing it," Neva explained.

"And you dared to use a switch on them?"

"Yes. When they started the War Song, I became very angry. I didn't stop to think what I was doing, I just grabbed a switch and lit in on them, as if they were bad children."

"And they didn't try to fight you?"

"No, they were just angry with me. They know that the War Song is bad and they know I am doing right in stopping it. So they let me."

"If they know it's bad, why do they ever start it?"

"Why do humans start wars?"

It was a question that Thorndyke could not answer.

"This is no time to talk philosophy," Neva spoke. "You're soaking wet and lost. You come home with me and meet my father. There you will also have a chance to study the Noros."

CHAPTER TWO

Yellow Lightning

THORNDYKE recovered his rifle from the slope where he had dropped it. The Noros clustered around him and it was in his mind to give them a demonstration of the weapon. On the other side of the pool, the garo had crawled out on the sandbank again. Thorndyke took careful aim at the head of the monster. The rifle cracked sharply; the garo's head vanished in the explosion.

The Noros seemed totally unimpressed. One Noro spoke to Neva.

"This is Tom. He says the gun is no good, it makes too much noise," the girl translated.

"But look what it did to the garo," Thorndyke said.

"He says he can do more than that to the garo, with his music," Neva answered.

"Eh?" Thorndyke said.

It was a worried psychologist who followed the girl through the jungle. Moving along with them as silently as shadows were the Noros. Thorndyke was very much aware of the puzzling mystery presented by these barrel-chested little men.

"Here is where we live," Neva said. They had come to a large open glade on the side of a mountain. Below them were the swamps and the rain forest. Above them a steep slope led upward to a high plateau. Directly in front of them, in the face of a limestone cliff, was the large opening of a natural cave. In the opening a tall man was standing. He waved at Neva, then, at the sight of the man with her, he came striding forward, astonished at the sight of another human being.

"Daddy, this is Jim Thorndyke. This is my father, Lawrence August."

"It is a pleasure to meet another human," August said, extending his hand. His grip was firm, his manners were courtly and pleasant. He came of a generation that put great emphasis on manners. "I'm glad to meet you. You are not, by any chance, the James Thorndyke who wrote the book on the psi function of the human mind?"

It was Thorndyke's turn to be surprised. "I am," he answered.

"Then there is no one from Earth I would rather make welcome here," August said. "Unless I miss my guess, we have here an example of the psi function, of the effect of mind on matter, unlike anything science has ever known before." He nodded toward the Noros, filing past them into the cave.

Thorndyke caught a throb of sound. As the Noros moved past them, they were singing.

"It is the gathering song," Neva spoke. "No, you must not listen, or you will try to follow them. Turn it out of your mind. Don't let yourself hear it."

"The gathering song?" the psychologist said. He felt an impulse rise in him to follow the little men.

"It is the song they sing when they are gathering for the night," the girl said. "It calls them together. Put your hands over your ears."

Thorndyke obeyed. The song dropped several notches in volume. The impulse that had been rising in him dropped to a whisper which remained, inside his mind, like an echo of siren music. *The Gathering Song! The War Song!* The song that was called *Journey to the End of Time!* Each piece of weird music seemed to have a special job. What other songs did they have? Above everything else, what vast mystery was hidden behind the music?

The Noros filed out of sight inside the cave and the echoes of the music died away. Thorndyke followed August into the cavern. Near the entrance, where the sunlight still fell, a complete camp had been set up. It was a comfortable place, but it was very near the entrance to the cave. Thorndyke wondered about the cat lizards coming in here at night, then the question passed from his mind and was forgotten.

"Where do the Noros live?" he asked.

"We do not know," August answered. "Somewhere here in the cave, but we do not know where."

"Haven't you ever tried to find out?"

A look passed between August and his daughter. "Yes," Neva answered hesitantly. "But somehow or other, they have always slipped away from us."

"Neva believes they hypnotize us each time we try to follow them," the missionary slowly added. He saw Thorndyke shake his head and continued: "I know what you are thinking—hypnosis without the full consent and cooperation of the subject, is not possible, but I am not certain that the Noros do not know more about hypnosis than we do. Certainly they know many things that—" He stopped abruptly. "Come, sit down, my friend, and tell me about Earth."

"Later," Thorndyke said. "Right now I want to talk about the Noros. Tell me what you know about them."

"It won't be much, I'm afraid," August answered. "The proven facts are very few. Everything else is guesswork. For instance, I don't know whether the Noros are a primitive people just beginning the climb to civilization, or whether they are the most advanced race in the solar system. ."

That night a storm whipped the jungle. Lying on the folding cot that August had given him, Thorndyke could hear the storm roaring outside the cave. Once something else roared out there too, a cat lizard or some other creature of the Venusian swamp. Thorndyke clutched his rifle. He could hear the creature in the glade outside the entrance to the cave.

Coming from nowhere and from everywhere, a burst of music sounded. It was *Journey to the End of Time.*

Out in the night something screamed. The music died.

Holding the rifle, Thorndyke moved to the entrance of the cave. A flash of lightning revealed that the glade was deserted. The creature that had been there was—gone.

What had happened to it? Thorndyke did not know. But he had the eerie notion that unseen eyes watched the entrance to this cavern and that unseen forces guarded it.

Neither Neva nor her father appeared. They seemed to accept the matter as commonplace, if they had heard anything.

It was an uneasy psychologist who returned to his cot that night.

THE NEXT morning, there was a roar in the sky and a stubby-winged spaceship barge flashed through the mists. Hurrying outside the cave, they heard the thrum of jets as the barge was eased to a landing on the plateau above them. A few minutes later a group of men were glimpsed coming down the steep slope. Neva stared toward them.

"Haswell!" she said.

Haswell, a machine pistol holstered at his hip, came arrogantly down the slope. He was a tall man, with a narrow face and sharp, alert eyes. Following him were two men whom Thorndyke did not know, although he recognized the type. Men like these two might be seen roistering in the spaceport of Luna, drunk and rolling down the main street of Venusport, hanging around the employment offices of the spaceship lines on Earth, trying to ship out to one of the planets, to any planet, it didn't matter which, just so they got away from Earth as fast as possible. They were space bums, willing to cut any man's throat for a dollar.

Haswell reached the glade and came toward them. "Hello, Neva. How are you, August?" His manner was friendly; there was a grin on his face. He looked at Thorndyke. The grin went away. "Who's this?"

Neva introduced them. Haswell said he was pleased to meet Mr. Thorndyke. His eyes said he wasn't.

"Why did you come back here?" Neva said.

"Maybe to see you," Haswell answered. "Boys, get busy."

The two men nodded. Moving to the entrance of the cave, they began to drive metal stakes into the ground. The hammers rang sharply in the quiet morning air.

"What are they doing?" August asked

"Staking a mining claim," Haswell told him.

"A mining claim?" the missionary was startled. "But there are no minerals here."

"That's what you say but that isn't what the counter says. I checked this mountain carefully. I couldn't locate the bed of ore but the counter says there's radioactive rock under the plateau, in tremendous quantities. With the price of fissionable material as high as it is today, this place is worth more millions than you can count." Haswell's adam's apple moved up and down as he spoke. Apparently the thought of millions made him want to swallow.

The sharp clang of the hammers was the only sound in the still air. Once the notices were posted, Haswell had exclusive rights to this area for twenty-five years. Slowly, Neva spoke. "That means mines will be developed here?"

"It certainly does," Haswell answered.

"But what will happen to the Noros?"

Haswell shrugged. "Out."

"But this is their home," the girl protested. "Suppose they don't want to move? What happens then?"

"In that case—" Haswell shrugged again. He broke off, to stare toward the cave entrance.

Five Noros, led by Tom, were coming out of the cave. Moving with a sureness that was full of meaning, they advanced straight toward the humans. Haswell's hand moved toward the machine pistol at his hip, then came away.

The five stopped in front of him, and Tom spoke in deep, guttural English.

"Go away," the Noro said.

"Go away?" Haswell was astonished, then angry. He laughed. "Well, if this don't beat hell—"

Tom spoke to Neva, in the Noro tongue, the bass tones ringing clearly as he expressed a concept he could not put into

English. Finishing, he did not wait for an answer, but turned and walked away. The other Noros followed him.

"What did he say?" Haswell asked.

"He said he had warned you and that whatever happens now, will be your own fault."

For a second, Haswell seemed shaken, then he grinned. "I thought those little devils would try to make trouble. Well, I came prepared for them."

"What are you going to do?" August asked.

Haswell did not answer. Motioning to the two men to follow him, he moved up the slope. They came back later, with three more men. All were heavily armed. All carried heavy metal cylinders and gas masks.

"Keep back," Haswell grimly warned August.

Putting on their masks, the men set up the metal cylinders at the entrance to the cave. They opened the valves; a heavy yellowish smoke sprewed out into the caves.

Haswell came over to August. "Gas," he said grimly. "That'll fix 'em."

From nowhere and from everywhere, from the thin layer of soil lying over the solid rock below them, seemingly from the very atoms of the air or perhaps from the structure of space itself, came a burst of music. A wild flood of roaring notes, it was—*Journey to the End of Time.*

Yellow heat lightning seemed to flicker in the air.

Standing near the mouth of the cave, one of the men snatched the mask from his face, screamed, and disappeared.

"What happened?" Haswell shouted. He moved toward the group of men there, then backed away. The yellow lightning flickered again. The second man was gone.

"The Noros are doing that," Haswell said harshly. His gaze fixed on Neva. "Stop them!"

"Stop them?" the girl faltered. "How can I?"

"You can stop the war song, you can stop this too. Take a mask and go into the cave—"

"She will do no such thing," August spoke.

Haswell snatched the machine pistol from the holster at his hip. He pointed it at August but when he spoke, the words were directed at Neva.

"Either go into the cave and stop them or I'll shoot," he said.

Thorndyke took a step forward. The gun muzzle swung toward him and slugs blasted past his head. Near the cave entrance, the third man screamed.

Haswell turned his head to look toward the sound. Neva grabbed his gun hand.

For a second, the two wrestled. As Thorndyke and August moved forward, something like a shimmering wall of light moved between them. The yellow lightning flashed. Neva screamed.

The spot where she and Haswell had stood was empty.

That much Thorndyke saw. Then the electric shock that went with the lightning hit him. He felt himself falling; then he didn't feel anything.

CHAPTER THREE

Journey to the End of Time

THORNDYKE recovered consciousness slowly. As the fringes of his senses came back, he was aware of vague sounds: the screeching of a bird in the swamp below, the far-off bellow of a bull garo. He groped through his mind for understanding. Something had happened, he didn't know what. Then he remembered. The jolt shocked him back to consciousness. He sat up.

Beside him, August lay stretched on the ground. The old man moaned softly. Thorndyke's memory still had blank spots.

His gaze roved, seeking what ought to be before his eyes, Haswell and Haswell's crew, the gas cylinders in the cave entrance, the yellowish gas, and Haswell's men, were gone. Haswell was gone. Neva was gone. Thorndyke struggled to his feet. Looking at the sun, he estimated that he had been unconscious for less than an hour. He bent over August. The missionary was breathing and, given time, would apparently be all right. The problem was—where was Neva?

When someone was lost, you shouted for him. Thorndyke's voice lifted in a shout. There was no answer. He had the feeling there would never be an answer. Panic rose in him.

Movement at the mouth of the cave caught his eye. Tom appeared there. With him were four other Noros.

The little men seemed frightened. They stared around. Their deep voices rang with questions. Thorndyke moved toward them. Tom pursed his lips, trying to form unfamiliar words. His first effort came out, "Whar—" The second time he got "Whery—" Then he got a recognizable, "Where—Nevy?"

"That's what I want to know," Thorndyke said. He reached out, seized the Noro by the shoulder, shook him as one shakes a recalcitrant child. The Noro's head rocked on his shoulders. Anger appeared in his eyes at this indignity, but he endured it. "Neva is gone," Thorndyke shouted.

"Gone?" Tom echoed. The anger went swiftly from his eyes.

"Yes, you damned idiot, she's gone. I want to know where. I want her brought back. I want it done right now. Do you understand me?"

The Noro was badly frightened now. Thorndyke released him. Tom's bass voice spoke in a whisper to the other two, telling what had happened.

"Where is she?" Thorndyke demanded. The Noros looked at him. They did not answer. Despair showed on their faces. "Gone—gone—" Tom whispered the word. "Journey— How you say? —to end of—time. Like with cat lizards, with bad man. She was near bad man when we send song. We not see her, not know—" The broken voice went into silence.

"Trip into time?" Thorndyke whispered.

"Into future, we send her," Tom answered. "I—cannot explain."

"You don't have to explain," Thorndyke said. "All you have to do is bring her back."

The Noro shook his head. "We cannot. It not possible. Most likely, it not possible. Sorry."

Again Thorndyke grabbed Tom's shoulder, again he shook, harder this time. "Damn you, you've got to bring her back!"

"But—most likely cannot."

"Why not?"

"Can send into time, cannot bring back, unless—"

The third Noro spoke abruptly. Thorndyke could not understand a word that was said but the Noros became excited. They looked at the psychologist.

"Thersill says, can try," Tom said.

"Can try what?"

"Can try bring her back."

"Then do it!"

"But there is catch."

"What catch?"

"Somebody have to go after her."

"I'll do it," Thorndyke said promptly.

"Is catch to that too," Tom said.

"Eh? What catch?"

"You may not come back."

"Well—" Thorndyke's hesitation lasted only a moment. His mouth closed with a snap. "I'll take the chance."

"Come then. Must hurry." Tom turned to the cave. Thorndyke followed the Noros.

Neva had said that she had tried to follow the Noros into the hidden depths

of the cave, but that they had always eluded her. Going with them, Thorndyke could easily understand that. They followed in darkness a twisting, winding trail visible only to the Noros. They stopped, and a door swung open. Thorndyke gasped.

Ahead of them was a great blue gulf of light, stretching away into the far distance. He saw that here, inside this high plateau, was a tremendous cavern. The floor of the cavern lay far below him, a vast panorama of miniature cities, of fields and forests, all in the same small scale as the Noros, and all bathed in the bright blue light that blazed in the center of the roof.

In the middle of the cavern was a building. It was large even to a human; to the Noros it must have been gigantic—the crowning effort of a race.

"FATHERS come here long ago from dying land," Tom explained.

A long flight of twisting steps led down to the floor of the cavern. They were spotted as soon as they appeared in the doorway; faces turned toward them, and the little men could be seen running toward the bottom of the steps. When Thorndyke reached the bottom, voices rang out, questioning, demanding. Tom had to do a lot of explaining fast. To Thorndyke, it was obvious that Tom had broken a tribal law in bringing him here. Tom's explanation was finally accepted, though with reluctance.

"Come to big building," Tom said.

The entrance to the building was large enough for him to walk through without bending his back. Inside, he caught a glimpse of a single immense room, but he was taken to a small enclosure that was apparently a workshop. Noro technicians were here. Tom explained to them what was needed. They looked at Thorndyke doubtfully, shook their heads, then got busy. First they got his exact weight, then they fitted a strange kind of metal cap over his head and ran a series of tests. Perhaps they were measuring minute brain currents. Why, he didn't know, and didn't ask. Other technicians were busy building a kind of metal pack designed to be strapped around his chest. He saw they were building two of the packs. Finishing this, they strapped the first pack around him, gave him the second to carry.

"Come," Tom said. Thorndyke followed the Noro into the big room.

Noros jammed it. They sat in orderly rows in a complete circle around the machine in the center. Tom led him down a narrow aisle directly to it.

It was like no machine Thorndyke had ever seen before. There were dozens of meters, their scales calibrated in colors, each monitored by a Noro in a control chair. In the heart of the machine was a master control board, at which a single wizened Noro sat, like an old spider in the midst of many webs. The old spider looked at Thorndyke. There was compassion in his eyes.

"From machine lines of—push—flow," Tom said. "Bad man had instruments which find lines of push from here. But he made mistake. He thought instruments said uranium was here."

Thorndyke grunted. He remembered Neva had said that Haswell had tried to get the Noros to guide him into the depths of the cave but that they had refused. They were concealing from the prospector the existence of this machine.

"Ready," Tom said.

"Ready," Thorndyke answered.

"Use this pack for Neva," Tom explained. "It bring her back, if we lucky. Without pack, she cannot return. We send you to take pack to her."

"I'm ready," Thorndyke said. Tom nodded at the ancient, gray-haired Noro at the master control. He pushed a switch. A gong chimed. The music began. It

came from the massed Noros. Beginning softly, it started to rise in volume, a gigantic chorus of bass notes, singing *Journey to the End of Time.*

In this split second, Thorndyke realized at least a part of the function of the music. It had originated as a musical expression of something else—a psychological process. It served to focus their minds, perhaps, or to induce the necessary mood. In itself, it was probably of little importance. The important part was within the mind. It was the mind that could look forward into the future—that could attract or kill. The mind could do a thousand and one other things, many of which it could not understand itself.

He saw, also, the part the machine played in this strange rite taking place in the cavern of the blue light. Roughly translated into human terms, the machine was a power amplifier. It received the thought pressures within the massed Noro minds and amplified them to any desired strength, concentrated them, focused them. Through the machine, the thought pressures could be focused at any desired spot inside the cavern or out of it. They could be focused on the ledge outside the entrance to the cave, in the jungle swamplands, perhaps anywhere on Venus.

In front of each meter, a Noro watched intently. The wizened Noro at the control board watched Thorndyke.

The music swept upward in a growing flood. Wild dancing notes made the whole building vibrate. The sound was like a mighty organ pouring out a growing volume of wild, enchanted music.

The wizened Noro at the control board, watching Thorndyke, shoved home a final switch.

Thorndyke screamed as a million microscopic needles jabbed him. He felt a supercharged jolt of electric tension spring into existence in the air around him. Yellow lightning licked across his vision. He saw the Noros, the vast hall itself, waver and fade like a vision seen through distorting glass.

Cold struck him, he did not know how many degrees of it, but he knew if it lasted long, he would be frozen stiff. He had the impression of flickering movement far too fast for the eye to follow.

The cold faded. He fell, stumbled, fell again, got to his feet.

Weak sunlight hit him. The cloud-bank was gone. The jungle was gone. The sun shone down on a dying planet.

He was on a slope. Below him in a valley a line of dead trees marked where there was a dry river-bed. Dust blew past him on a languid wind.

This—this was the future of Venus, how many million years away he could not tell. This was the Veiled Planet when it was no longer veiled. He was not at the end of time, but he was near it, for this planet.

He was aware that his mind was showing symptoms of refusing to obey him. His will forced it back into its proper groove. Below him, on the slope, a creature lay—a cat lizard. Dead. He could not see the cause of death. Nearer still there was a man, one of the men who had been with Haswell. The man was dead.

WHERE was Neva? He lifted his voice again, calling her name. The effort made his lungs hurt. In the thin air, his shout was not much louder than a whisper. He felt his heart begin to pound as it struggled to supply sufficient oxygen to his tissues. In this air, the life-giving gas was scarce.

The pack circling his chest hummed softly. He felt the surge of electric currents in it, reminding him that back in another time the Noros still maintained contact with him, through this pack.

"Neva!"

"A halting voice answered him. She stood up slowly.

He saw her. He ran toward her.

She stared at him as if she could not believe her eyes. It was the first time in his life that a woman had ever seemed pleased to see him. Her clothes and her face were dust covered. He thrust the pack toward her. "Here. Put this on, I came for you. This will take you back." The effort made him pant.

"You—came for me?" She seemed dazed, unable to comprehend. Reaching out, she touched him. "You're real," she whispered.

He tried to grin. "The Noros sent me. This pack will take us back. There isn't time to explain. Just put it on—"

She took the pack from him, stared at it as if she did not understand. To one side a footstep squeaked. A voice rasped: "Where's *my* pack?"

Haswell stood there. He had been sitting down and had remained unseen until he stood up.

Aghast, Thorndyke stared at the prospector. Until this moment, he had forgotten that Haswell existed.

"So you didn't bring a pack for me?" Haswell said.

"I—I'm sorry. I—"

"Don't let it bother you," Haswell said. "I'll just take yours." He lifted the machine pistol.

"Like hell—" Thorndyke said. Haswell squeezed the trigger. A stream of lead squirted past Thorndyke's head. He ducked.

"If that pack will get me back, I want it," Haswell said. "I'd just as soon take it off a dead body."

"All right," Thorndyke choked. The pack was a circling band of metal eighteen inches wide and over two inches thick. He had seen the Noros fit a series of compact tiny instruments into that space. Tiny batteries furnished a limited supply of power. Slowly, Thorndyke released the catches. He slipped it from his body, handed it to Haswell. The prospector reached for it. Thorndyke's fingers seemed to loosen their grip. The pack fell to the ground. Haswell bent to pick it up.

Thorndyke stepped forward. With all the strength in his body, he hit the prospector behind the ear.

Haswell went over. Thorndyke jumped at him. Both went to the ground with Thorndyke on top. Haswell, gripping the pistol, tried to bring the muzzle up against the body of his antagonist. Thorndyke caught the wrist of the hand that held the gun. He heard Haswell swear.

The prospector was as agile as a cat lizard. Somehow he got a knee up into Thorndyke's groin. Stars splashed before Thorndyke's eyes. Strength went out of him. But he held on to the gun hand. He waited for his strength to come back.

It didn't.

Aware that his lungs were laboring for air, he guessed the fatal truth. His strength was not coming back. Strength depended on oxygen and there was too little oxygen in this air to support activity. A fight here was impossible. Violent exertion would result in the collapse of oxygen-starved tissues. The cat lizard and the man on the slope had died for this reason.

Panting for breath, Thorndyke let Haswell try to throw him off. His sole activity was to hold on to the gun hand.

Haswell dropped the gun. After that, Thorndyke made no effort to resist.

He felt Haswell heave violently at him. A quiver ran through the prospector's body.

"Damn you—" Haswell shuddered. And was still.

The man was dead. His overburdened heart, pounding furiously in an effort to supply oxygen to meet the needs of tissues that had evolved on Earth, had simply collapsed from the effort. Death here was simple and quick.

Thorndyke knew that he too, was very close to death. He did not move a muscle.

He was aware that Neva was trying to help him. He whispered to her to stay away.

He was fighting another battle, harder perhaps than the fight against Haswell, a fight for enough oxygen to stay alive. The only way he could win was to keep absolutely quiet. Even then, he was not certain he could win. It might be that his efforts to breathe, even the beating of his heart itself, used up more oxygen than he was taking in.

He thought, *Here, near the end of time, when the solar system is running down, when man and all of man's achievements are gone.*

Every muscle in his body screamed for more oxygen. Every instinct in him yelled for him to breathe faster. But, if he breathed faster, the very act of breathing itself might be using up more oxygen than this air contained. He forced his laboring lungs to breathe slower and slower.

Eventually, nerve cell by nerve cell it seemed to him, the clamor in his body died down. He knew then that he had won this fight. He sat up.

He told Neva what had happened. "Put the pack on, Neva. I'll put mine back on. We'll get out of here."

Back to a day when oxygen was plentiful, back to a time when the solar system was not near death. He picked up the pack, started to slip it into place, stopped, stared at it. For a moment he thought his heart was going to stop.

Either he or Haswell had kicked the pack. Part of the metal cover had been knocked off. Inside, in a jangle of broken wiring, all loose ends and smashed connections, hung the broken coils and tubes.

"Can you fix it?" Neva whispered.

"I can try," he answered.

Half an hour later, he knew it was a hopeless task. Special tools were needed, special knowledge, special skills, tools and knowledge and skills that only the Noros possessed.

"You—you can't go back?" Neva asked him.

Thorndyke shook his head. He was marooned here, forever.

"Then I won't go either," Neva said. "If you have to stay here, I will stay too, with you."

In another world and in another time they had had a word for what she was saying. It was a word that Thorndyke had never fully understood until now. Now he knew what it meant, knew also that it was too late to realize that meaning. He choked.

They sat side by side, leaning against a stone ledge, and watched the dull red ball of the sun go down. It went down very slowly.

"LISTEN—" Neva whispered. Thorndike at first thought his ears were deceiving him. In the thin air of this planet, coming from nowhere and from everywhere, was a trace of music. He listened to it, caught his breath.

It was the madness melody: *Journey to the End of Time.*

It swelled in a mighty chorus, burst into a flood of sound, then died in quick silence.

On the slope above them bass voices called.

"Thorny! Nevy!"

They leaped to their feet.

"Here!" Thorndyke called, huskily.

(Continued on following page)

For excitement and thrills, don't miss "D. O. A.", starring Edmond O'Brien and Pamela Britton—the story of a man who turns himself in for his own murder!—and "Quicksand", starring Mickey Rooney and Jeanne Cagney—the tale of a twenty-dollar bill that opens a trail to death!

(Continued from previous page)

On the slope above them were—Noros! They saw the face of Tom. It was a worried face, then at the sight of them, it broke into a grin. Tom came bounding down the slope to them. He too, wore a time pack. The thin air did not seem to bother him. His barrel chest hardly heaved.

"Was worried—oh, I see. Get plenty busy here plenty quick."

He saw the damaged pack, guessed what had happened. He and the other Noros with him got busy. Noro tools they had, Noro knowledge, Noro skill. Thorndyke's voice lifted in a shout of exultation.

"Pack fixed," Tom said. "Now we go back again." He looked up at Thorndyke, tried to find words for something he wanted to say, spoke rapidly to Neva in his own language.

Neva translated. "He says to tell you that the Noros came from this time, long ago, that they escaped from the oxygen death of this world back into time, fleeing the death that is here."

"What?" Thorndyke gasped. Yet he knew the Noros had come from some other land. Why not from this land? Their barrel chests could only have evolved in air where oxygen was scarce. Most of all, their tremendous sciences could only have been the result of millenniums of development.

"He says to tell you that they are the descendents of both humans and Venusians, that the two races intermingled and became one race, becoming smaller at the same time. He says that in one sense, the Noros are your far-removed grandsons."

"Grandsons!" The thought shocked him.

Yet he saw that, in one sense, at least, it was true. To them, he was Cro-Magnon man, the shaggy man beast of the dawn world.

"Hi, pop," Tom said, grinning.

"Hi, son," Thorndyke answered.

They fitted the packs into place. Thorndyke and Neva went together, through the biting instant of cold. The vast cavern appeared and again in their ears was the enigmatic music—*Journey to the End of Time.*

The great hall rang with the sound of it. To Thorndyke, it was the happiest sound he had ever heard.

LATER, Thorndyke returned to Earth with Neva. Still later, he built himself a house in the heart of the Rockies, a house with a picture window looking out over a breathtaking panorama of mighty peaks stretching away into the far distance.

In his hand is a pleasant drink; the room is cool; the touch of spring is in the air. The cushions are soft and Neva is sitting beside him, snuggled close, her head resting on his arm, her dark hair flowing downward.

With a shock, he realizes that this is the hallucination that came to him in the swamp.

The future that he saw on far-off Venus has come true.

Or has it? He may still be in the pool of water, with the garo searching for him. The Noros on the bank may be projecting into his mind the colors of the Rocky Mountain sunset, the picture window, even Neva herself.

Which is the reality, and which is hallucination?

He realizes he will never know. He doesn't care. It is enough just to dream that she is here with him and that the sunset colors are gilding the distant peaks with gold.

There is a trace of soft music somewhere in the background. He listens. Is he remembering something or is he really hearing this music? It is the soft muted strains of *Journey to the End of Time.*

THIS isn't an anniversary for *Super Science*—it's our ninth issue since the resurrection—but somehow we feel that we've passed a milestone. Our initial difficulties have been ironed out, we've accomplished just about what we set out to do—with your help—and now, it seems to us, is a good time to look around, set our sights a notch higher, and start climbing once more. For that, we need your help again.

Your comments on and ratings of the individual stories we've published have been enormously helpful. But now we want something more—several things. Is there any field of science-fiction that we haven't published, and that you'd like to see in these pages? If so, tell us, and name examples. Have we got enough departments already, or are there others you'd like to see?

Anything else that affects the magazine in general, not just one particular story or issue, we'd like to hear about. Give us a thorough working-over; we'll be grateful for it—and the result, we think, will be increased enjoyment for you.

Dear Editor,

I won't call you "Willy" I know that Mr. Jakobsson is probably the "senior editor" that was mentioned in M & M. Then who sweats out the letter-column? Fred Pohl? Ummmm? (We sometimes wish he did.—Ed.)

The March 1950 issue of SSS was a stellar issue indeed. With two of the biggest (*the* biggest?) names in stfictiondom on the cover, you can't miss. Especially with that supporting cast including old-timers Jones and Gallun with zooming John D. MacDonald and Arthur Clarke. My apologies to Robert Arthur if he isn't a pen-name, which I suspect but can't prove! (Apologies are in order.—Ed.)

Saunders cover very good as far as a piece of work such as it is goes. Same old squawk about cover-doesn't-fit-any-storeeeee...

Anyhow, I was mighty pleased to read a vV story that smacks of the "old" van Vogt which I admire much more than many of his present-day (but still slightly terrific) pieces. I imagine that the brain-truster boys will go to work and gnaw on Van's neck about the theory and science of the contraction-field, but I'm not gonna. I sez: More!

Bradbury is still on his Mars theme but I liked this, somehow, much better than lately.

As far as I know, this is Raymond Z. Gallun's first appearance since his disappearance from the field some years ago. A prolific author, he always did do a pretty fair or better job. This is a better one. I hope to see more by him. This captured some of that atmosphere that seems to be missing these days. Those old yarns fairly exuded (?) sheer atmosphere whereas the complexity of plot, detailed characterization, etc., wasn't so highly accentuated.

MacDonald's little piece was quite all right. How about a long one from him soon? I think this short-short was a clever little bundle with a seed of sarcasm or satire tucked snugly inside.

I never was too familiar with the works of Robert Arthur but I have read some stories by him that were by far better than this effort. This theme is, I fear, getting passé. As humor, it done flopperooed. I suspect an SSS staff-member authored this. (Nope.—Ed.)

Now, next coming is what I like! Clarke sure can capture, snare, envisage or some-

thing, this far-future atmosphere. He ought to be sub-titled, "The Far-Sighted Briton"! I could welcome a Clarke story like this each issue. I could? I *would!*

The Prof. Jameson saga rolls on. It doesn't seem to be anything stupendous. And it seems as if these metal men could get up a better rig. Not so vulnerable. How about anti-gravity (or anything) instead of these metal wings!? And so on. But I am still able to wade into one of these stories without too much trouble. Keep them coming.

That cute little item on page 37 was... uh...cute. How about some more? Who wrote it anyway? (E. E. Stuck.—Ed.)

All of the departments were well worth the space devoted and we fans thank you for the space you are giving us. Small print, as used in the letters, could give more space to the fanzine reviews and Jimmy could do a more detailed job on some zines. The book reviews are just about the best and most up to date that can be found. And they aren't all simply rave notices either. And the M & M department is coming along fine. I think editors are borned humorists. As evidenced by that little item in the last letter! We fan letter-hacks will get jealous!

Ed Cox
4 Spring St.
Lubec, Me.

Dear Ed:

Some time ago I promised to drop you a line and comment on every issue (July 1949). Well, circumstances dictated otherwise and I am now settled in Grand Rapids teaching school. So to make up for it, I'll comment on 1949 in all.

My list of the ten best short stories is:

1. I, Mars—Ray Bradbury
2. Appointment for Tomorrow—John D. MacDonald
3. The Wall of Darkness—Arthur C. Clarke
4. The Timeless Man—Frank B. Long
5. Delusion Drive—Peter Reed
6. The Hunted—John D. MacDonald
7. Dreadful Dreamer—Margaret St. Clair
8. World of No Return—Bryce Walton
9. Impossible—Ray Bradbury
10. The Survivors—Bryce Walton

The ten best novelettes: (You actually printed only one novel, "The Brain Beast" —William F. Temple.)

1. Gateway to Darkness—Fredric Brown
2. This Star Shall Be Free—Murray Leinster
3. Moonworm's Dance—Stanley Mullen
4. The Earth Killers—A. E. van Vogt
5. The Black Sun Rises—Henry Kuttner
6. The Metal Moon—Nell R. Jones
7. Son of the Stars—F. Orlin Tremaine
8. The Bounding Crown—James Blish
9. Parasite Planet—Nell R. Jones
10. Minion of Chaos—John D. MacDonald.

Actually for my book the first year only turned out one story which fell into the classic class of the old SSS and that is Bradbury's. In fact I list that as the best science-fantasy from *any* magazine in 1949 and it certainly ought to be anthologized.

But don't think I am maligning your editorial efforts in the past year. After all if your first year was perfect where in hell would you go?

You certainly are starting out the new year right anyway; two issues and *three* classics already for this year:

The Long Dawn—Noel Loomis
A Step Farther Out—Raymond Z. Gallun
Outcast of the Stars—Ray Bradbury

Each one of these is an outstanding story and each has excellent characterization. Gallun's, particularly, is an excellent addition to the stories on the conquest of space.

In the process of trying to teach high-school kids about literature I have come to a few conclusions about science-fiction. First of all and most important is the attempt of authors to get away from the unreal romanticism of the space opera and to write stories of science which have touches of realism. This parallels the same development in American literature which has grown to a deeper and grimmer realism through two world wars. J. D. MacDonald is one of the better exponents of this new realism with the exception of "Death Quotient" with its very unrealistic ending. "Trojan Horse Laugh" is the best example of realism (and very grim indeed) that he has written so far. Secondly I feel, and sincerely, that very few of the present science-fiction authors will be able to adapt themselves to writing stories for the big book companies. The companies will be

OPINION TALLY

March, 1950

1.	A Step Farther Out.....	2.0
2.	Rogue Ship	2.8
3.	Outcast of the Stars.....4.0 Exile of the Eons.....4.0	
4.	World Without Darkness..	4.8
5.	The Wheel of Time.....	5.3
6.	The Ultimate One.....	5.8

wise and are being wise in getting original stories, developing new authors, and having their steady authors attempt science-fiction stories. George R. Stewart's "Earth Abides" is well written even though it covers a theme well worn in the field, likewise with "The Big Eye" I'm looking forward to further attempts. I have already picked up Asimov's "Pebble in the Sky" but have not as yet read it.

Well, enough of that, a few requests and I shall close.

Wanted: Trimmed edges, the month *and* the year on the front, more scientific covers, Rocklynne's "Darkness" series, tell Merlyn I still think "Sunken Universe" deserves a sequel. (He wrote to me and said he felt the story had been away from the public too long, I disagree.) Anyway I think you have a swell magazine and I rate it among the top three. Good luck in 1950!

Sincerely,
W. R. Clack
811 Royal Oak S.W.
Grand Rapids 8, Mich.

Dear Editor:

Shelby Vick's letter rather surprises me; I didn't know you are supposed to be anonymous. According to an old fan mag announcing the return of a new Popular s-f mag, you are Joseph Quinn. (We were, but no more. Guess again.—Ed.) Of course your name doesn't appear anywhere on the contents page, as in some prozines, but then, neither does Mary Gnaedinger's.

Incidentally, why include the departments among the rating of the stories? Most persons don't like them as well anyway, and if someone just happens to dislike a particular story for no reason other than that it rubs him the wrong way, he's apt to put all the departments ahead of it, even though it may have been much more worthy. I've known some people to put the ads ahead of a story they disliked, just to be mean to the story. Therefore, to make it fair to the authors of the stories: get the non-fiction features out of OPINION TALLY. (They're out.—Ed.)

Noticed that one of your epistoleers hasn't seen a fanzine. Unfortunately that's the case of many new fans. So, editor, I'd feel grateful if you'd include this free ad when (ahem) you publish this missive.

I'm putting out a fiction fanzine; a thing that is strange in these days of zines carrying articles written by amateurs who should have stayed out of encyclopedias and let the persons reading their muddled versions of Britannica read those said encyclopedias instead. The first ish was hectographed and sold for 10¢. The second is probably going to be mimeographed, for 15¢. Sixteen pages or 18, I'm not sure yet. When I get enough subscribers to make the attempt worthwhile, I'll increase the number of pages to 20 or 22 (or maybe even more) without an increase in price. The purpose of this zine (unlike others, it has a purpose) is to aid the fan (amateur) writers who want to turn professional someday. It's a good place to practice, and the readers should be good critics. As you, editor, probably know, much of the fan fiction now appearing is not worth the paper it is mimeographed on. Has anyone ever stopped to ponder the reason? There are many good amateurs, but not enough. Where have all the good fan writers gone, you ask? Well, what about Jack Vance, Joe Gibson, E. E. Evans, Ray Bradbury and many others??? When they left fandom, they left behind a big gap. Today, with the influx of newer writers, fan fiction has a chance to improve: if someone will only let it! By such new writers, I mean such fellows as Andrew Duane (soon to appear in a number of zines beside my own, FAN-FARE), Toby Duane (also soon to appear in other zines, and already having appeared in SPACEWARP and SKYLARK, formerly GAAA), Allan Leverentz (a completely new writer whom I am proud to have discovered all by myself), J. Howard Palmer, and other notables.

I hope, Editor, that you don't edit the material above. (Had to: it started to sound like our house ads. Sorry.—Ed.)

Sincerely yours,
W. Paul Ganley
119 Ward Rd.
North Tonawanda, N.Y.

Dear Editor:

Writing in behalf of the PORTLAND SCIENCE-FANTASY SOCIETY, I would like to inform all interested readers of SUPER SCIENCE STORIES of the forthcoming Eighth World Science Fiction Convention, to be known as the NORWESCON. The NORWESCON is scheduled for the Labor Day week-end of Sept. 2-3-4 in 1950 and will be held in Portland, Oregon. Fandom's top-notch event will present a host of notables, including authors, editors, illustrators, and of course, you the fans.

Among the major features spotlighting the Convention is the annual auction. Those of you who have been bitten by the collecting bug will know what this means. Books, magazines, original illustrations, etc. will be up for auction, and if I don't miss my guess, bidding will be spirited. Speeches and entertainments of various sorts will help complete the proceedings. If you've never been to Oregon, you've a pleasant surprise in store. The state is a scenic treasure-house. Honestly! Words can scarce depict the beauties that abound on every hand. But come, let your eyes be judge.

Upon the mailing of a dollar to Ruth Newbury, Treasurer, Box 8517, Portland 7, Oregon, you will become the recipient of a membership card, a copy of the souvenir convention program booklet and the pre-convention fanzines. So, for a nifty '50, it's NORWESCON!

Those interested in procuring further

particulars are requested to write to NORWESCON, Box 8517, Portland 7, Oregon. And thank you editor Blish.

Joe Salta
1615 S.E. 43rd Ave.
Portland 15, Oreg.

Dear chums: Quinn, Pohl, and Blish are all good friends of ours, but they are none of them the real genuine *us*.

Controversy Dept.:

Dear Editor & Mr. Wolfe:

It seems to me that I should answer the attack of Mr. Wolfe on my recent objection to reprints. I'll send a carbon of this to Mr Wolfe and perhaps if he has a reply he can get it in the same issue and we'll get this over with faster.

My letter was undoubtedly in poor taste for the simple fact that I did not make myself clear enough. The points I wish to bring out are:

(1) Most, if not all, reprint magazines today are doing a good job BUT—
(2) Prior to 1925 the amount of stf and fantasy published and now available to fiction publishers is negligible;
(3) From 1925 until after the first atomic war stf was such a minor item that for the most part, (about 90%), stf publishers had to pay less than publishers of other material and consequently the writing was
(4) mostly very trashy and often rather dated;
(5) Today, while stf is not yet the greatest thing in literature, it is gaining in popularity *and in quality;*
(6) New people are turning to stf each month and I hope this continues, which hope makes me ask
(7) What happens when the 6 basically reprint magazines now in existence use up the supply of good stf from the past? Will they print the poorer stories?
(8) Then what if a potential new reader buys a mag containing the second-rate reprints—which I can assure you are quite dull and even ridiculous—as much pioneer work must be in any field. Now it is human to judge a group by an individual person or item from that group. Wouldn't stf stand a chance of losing a reader?
(9) For this point I'd like to say, in regard to the VOICE OF FANDOM, that fandom represents LESS THAN ONE TENTH of the readership of stf.

In conclusion, I'm not just interested in how stf sells this month, but rather in how it sells next month and the next month thereafter. You see stf gives me a lot of happiness and it involves a big share of my social life. Stf aims toward something better and therefore it is, in a sense, something better in itself. I know I can't support stf alone, and neither can the few hundreds of active fans. Stf must please a larger audience, not only today but next month and next year ad infinitum.

To that may I append a highly personal thought: "The fact that a few humans have conceived and supported prophetic fiction moves the human race's chance of survival up another decimal point."

Rosco Wright, President
Eugene Science Fantasy Society
146 E. 12th Ave.
Eugene, Oreg

Dear Editor (and Mr Wright):

Mr. Wright has sent me a copy of his letter of Feb. 6th to you concerning his feelings on reprints. After reading this and trying to gather the salient points he makes, I can offer the following ideas.

1. Most writings of any by-gone age are "dated". Even the best of the old classics of English literature, the Bible, all the old novels which "live" and stay in print through years, etc., all show evidence of the day and age in which they were written. Even so, we can appreciate and enjoy reading from writers of that time because we know they had excellent minds, many original ideas, and much talent in their chosen fields. What they may have lacked in swift action of today's style, they made up for in excellent plots, carefully chosen language, and an abundance of smooth-flowing ideas.

2. Before 1923, to my knowledge, there was no science-fantasy magazine as such, and prior to that time the only outlet for such writing was principally in the old Munsey magazines of ARGOSY, ALL STORY, and their associates. Who can say that the old Cummings, England, Serviss, Smith, and others are so far down in quality that the readers do not want to read their works today?

3. So-called "trash" will exist in writings of any period. Today we are blessed with a lot of it. But also we have much that is good and worth remembering. A reprint editor has a job to weed this out and bring us the best. There is just as much hazard in driving away new readers with today's "trash" as with that of former years.

Chas. W Wolfe
Box 1109
Las Vegas, N. M.

Thanks to both of you for opening up a subject that seems to be bothering a good many science-fiction readers these days. We'd like the rest of the gang to join in; we think both Mr. Wright and Mr. Wolfe have put their cases ably, but that the last word has not been said.

(Continued from page 65)

when we made our break the rest of the *Stella's* crew died to a man to send me home again with this warning. I am incredibly lucky to be here at all, and I am humbly grateful that I was spared to bring you word of what to expect. I can tell you no more. The rest—is up to you."

He slumped back, exhausted, and waited for the chair to resume its motion. There was a faint rustle of movement, as of people stirring in the darkness about him.

The chair did not move, and a quick alarm fell upon him.

Why didn't someone speak?

HE SPRANG up, unable to bear the silence longer, and ripped the bandage from his face. For a moment the glare of light blinded him before his vision cleared and he saw his fingers gripping the blindfold bandage before him.

He recoiled in stunned comprehension from the sight of an old man's hands, their blue-veined skin loose and wrinkled with age.

"Five months," he whispered, and thought of the pale, foreshortened faces that had stared up at him as he fell Earthward in his torn parachute. *"It was too long—"*

A spray of pungent gas stung his nostrils, briefly.

"You may sleep again now," the attendant's voice said, soft with mock respect.

"Until tomorrow night, lieutenant!"

The theater lights dimmed slowly as the amnesiac took effect. Darkness rolled back upon him, blurring the tiers upon tiers of grinning faces with their glossy ermine-white hair and their bright, amused yellow eyes.

BIG PROFITS FOR YOU

Making Finished Photos in 2 Minutes! Wonderful Photo Invention

PDQ CHAMPION PHOTOMASTER

Takes and finishes 30 to 40 photos an hour

COMPLETE PORTABLE PHOTO STUDIO

Size 4½"x5"x10" Weighs only 6 lbs.

OVER 700% PROFIT!

Beautiful, everlasting photos — black and white or sepia, size 2½ x 3½ in. Guaranteed not to fade. No dark room needed. Photos are taken DIRECT on "SUPER SPEED" direct positive paper. Loads enough paper for 50 shots in half a minute — in broad daylight.

BE A P.D.Q. PHOTOGRAPHER

No experience required. Simple directions teach you quickly. Work at home or travel. Make expenses plus extra profits. Pictures cost you only 2c. Sell for 15c to 25c. Folks just grab for 'em. They are amazed to see their own photos come to life in broad daylight. Photomaster "shoots" any subject — individuals or groups — buildings and scenes. This new and fascinating business offers unheard-of money-making opportunities everywhere—every day throughout the year. DETAILS FREE! WRITE

P D Q CAMERA COMPANY

1161 N. Cleveland Ave., Dept. 10, Chicago 10, Ill.

"Since 1888"

TOOTHACHE?

Quick relief with Dent's. Use Dent's Tooth Gum or Dent's Tooth Drops for cavity toothaches. Use Dent's Dental Poultice for pain or soreness in gums or teeth. At all drug stores

DENT'S TOOTH GUM TOOTH DROPS DENTAL POULTICE

Make Your Electric Drill A CIRCULAR SAW!

Save time . . .
Save work . . .
Save money

● Right-angle drive with oversize guards is supersafe, perfectly balanced for one-hand use. Attach it to any drill ¼" and up, in seconds. Full 1⅛" cut, handles 2" stock by turning over. Machined cutting guide for extra accuracy. Oilite bearings, sealed gears for long life. Complete with 4" high speed steel saw blade. $7.95 Money-back guarantee.....only

Dealer Inquiries Invited

Postpaid—send check or M.O. C.O.D.'s accepted—postage extra.

GLEAM PRODUCTS (Dept. P-107) Whitestone, L. I., N. Y.

"Saved my Life

A God-send for GAS-HEARTBURN"

When excess stomach acid causes painful, suffocating gas, sour stomach and heartburn, doctors usually prescribe the fastest-acting medicines known for symptomatic relief—medicines like those in Bell-ans Tablets. No laxative. Bell-ans brings comfort in a jiffy or return bottle to us for double money back. ©

BELL-ANS for Acid Indigestion 25c

High School Course at Home

Many Finish in 2 Years

Go as rapidly as your time and abilities permit. Course equivalent to resident school work — prepares for college entrance exams. Standard H. S. texts supplied. Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

American School, Dept. HB49, Drexel at 58th, Chicago 37

Nationally advertised Card Ass'ts—sell only 100—make up to $50! Complete line Xmas, Everydays, Wraps, Stationery. Also dramatic "Spang-l-ettes" and Famous "Prize" Asst's; Notes: Name Imprinted Xmas Cards, 40 for $1 up. Up to 100% profit. Money back guarantee. Request "Prize" and novel Metallic Xmas Boxes on approval.

30 FREE SAMPLES

CHILTON GREETINGS, 147 Essex St., Dept. P-33, Boston, Mass.

WANT $50 QUICK

NAUSEA

due to motion upsetting the organs of balance, relieved with

MOTHERSILL'S SEASICK REMEDY

for Land and Sea travel. Satisfactory results or money refunded.

THE WORLD OVER

INVENTORS

If you believe that you have an invention, you should find out how to protect it. We are registered Patent Attorneys. Send for copy of our Patent Booklet "How to Protect Your Invention," and an "Invention Record" form. No obligation. They are yours for the asking.

McMORROW, BERMAN & DAVIDSON

Registered Patent Attorneys

150-H Victor Building Washington 1, D. C.

POPULAR **DEMAND—**
DEMANDS POPULAR

Whatever you demand of your reading, there's an answer to it in the more than 20,000,000 words published annually under this seal—

SPORTS **DETECTIVE**
LOVE **FANTASY**
SCIENCE **WEST**
ADVENTURE **MYSTERY**
RAILROADING

Watch for this Popular Fiction Group seal on every magazine you buy. It is your one sure guide to good reading always!

(Continued from page 83)

she at last broke the heavy silence. "Oh—*Gregor,* my dear—I had no idea. Promise me—*promise me*—that you'll take better care of yourself. *Please,* Gregor. I'm afraid for you . "

Gregor heard a roaring sound in his ears. There it was again. And from Delta, of all people! Next she would be asking him to seek a psycho-conditioning treatment.

"I don't want that kind of help, Delta!" he shouted, "I want *you.* I want warmth and human sanity in this crazy inhuman world! Is that asking so much?"

"Gregor, please see Horrell," sobbed Delta. "He'll help you. He's the finest—"

"Stop it! Stop it, do you hear me!" His own voice sounded alien and harsh to him. "I don't want conditioning! I want one single, real human relation! Just one! Give me a child, Delta! A real, human child—"

Delta's hands plucked at her throat as she stood staring at him. Quite suddenly an expression of almost unbearable pity came over her. She took a faltering step toward him, hands held out, as a mother would approach an injured child.

"Oh, my darling, my dear! *You don't know—you really don't know.* ." She sobbed brokenly. "It—it's impossible—impossible."

The sullen fear that lived always in Gregor flared terrifyingly. He took Delta by the shoulders and tightened his grip until she cried out with pain.

"What is it? What are you trying to say? What don't I know?" He shook her hard. "Why is a child impossible? Why? *What is it that I don't know?"*

Delta tried to twist away from him, but he held her fast.

"Please, Gregor! Please let me go!"

"Tell me!"

"No! No, Gregor! See Horrell—*please!"*

With a spasmodic gesture he flung her away from him. He thrust blindly through the half-dilated doorway out onto the terrace. Overhead the stars stared down unwinkingly, and far below the dark City lay sprawled out at the base of the sheer cliffs on which he had built his archaic house. But Gregor saw none of these things. He was full of grief and terror. He stumbled to the edge of the terrace and stood there, rocking stupidly back and forth. He could hear Delta sobbing in the study.

A name—a familiar name echoed in Gregor's mind. Delta had said—

A silent, gliding thing appeared out of the shadows; it stood beside him courteously.

"Can I get something for you, sir?" asked Roberts.

Gregor turned and stared blankly at the automaton's shadowed face.

Roberts repeated his question.

Gregor spoke carefully, as though each syllable hurt his mouth.

"Who—who—is—Horrell?"

"Horrell is one of the finest robo-psychologists in the City, sir," said Roberts softly. "He specializes in the adjustment of class ones exclusively."

The night pinwheeled. Gregor took one stumbling step forward into darkness shot with whirling lights. The sound of Delta's sobbing faded above and behind him as he fell.

There was no real pain. Only a jarring nausea and stark, hideous disappointment. Gregor lay at the base of the sheer drop, his plastic body bent and distorted. The stars and the lights of the City seemed to blend in a fantastic montage.

Gregor waited for a death that he knew at last was not coming, a release that would be forever denied. The night echoed to his bitter laughter.

In the distance he could see the angry lights of an approaching repair-squad.

Up to $18.00 in an Evening's Spare Time!

29,000,000 prospects waiting for amazing refrigerator control! EXCLUSIVE D-Frost-O-Matic ends messy, wet defrosting . . . Saves Food . . . Saves Electricity. Safe, Automatic—GUARANTEED TWO FULL YEARS!

SURE-FIRE SALES PLAN—Clicks 95 times in 100 in Homes, Apartments. John C. West of Ohio sold 94 in three weeks' spare time—made $611 clear profit. Write for FREE DETAILS—TODAY! Specify Territory.

D-FROST-O MATIC

8 N. Michigan Ave. Dept. PFG-7, Chicago 2, Ill.

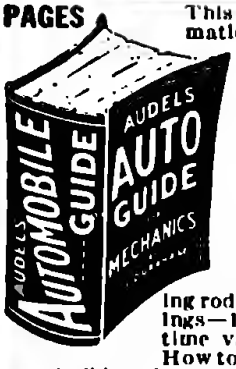
SEND FOR THIS FREE!

Make money. Know how to break and train horses. *Write today for this book FREE*, together with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the saddle horse, check here ( ) *Do it today—now.*

BEERY SCHOOL OF HORSEMANSHIP
Dept. 7 Pleasant Hill, Ohio

WHAT ALL AUTO MECHANICS WANT TO KNOW

1800 PAGES



This Big Practical Book gives full information with working diagrams covering the principles, construction, ignition, service and repair of modern cars, trucks and buses.

Diesel Engines, Hydramatic & Fluid Drives Fully Explained.

A complete Guide of 1800 pages, with over 1500 illustrations showing inside views of working parts, with instructions for service jobs.

IT PAYS TO KNOW

How to fit pistons—How to locate engine knocks. How to fit connecting rod bearings—How to service main bearings—How to recondition valves—How to time valves—How to adjust fan belts—How to adjust carburetors and chokes. How to rebuild a clutch—How to service automatic transmissions—How to service brakes—How to adjust steering gear—How to cope with ignition troubles—How to service distributors—How to time ignition—How to "tune up" an engine.

$4 COMPLETE • PAY $1 A MO.

TO GET THIS ASSISTANCE FOR YOURSELF SIMPLY FILL IN AND MAIL COUPON TODAY.

AUDEL, Publishers, 49 West 23rd St., New York 10, N. Y.
Mail AUDELS AUTO MECHANICS GUIDE ($4) for free examination. If O. K., I will send you $1 in 7 days; then remit $1 monthly until $4 is paid. Otherwise, I will return book promptly.

Name _____

Address _____

Occupation _____

Employed by _____ PER

"I Have Earned an Average of
$15.20 AN HOUR"
with Science's New Midget Miracle,
the PRESTO Fire Extinguisher

Says William F. Wydallis, Ohio
Many Others "Cleaning Up"—So Can YOU!

Science's New Midget Miracle—"PRESTO"

W. F. Wydallis

AMAZING new kind of fire extinguisher. Tiny "Presto" (about size of a flashlight!) does job of bulky extinguishers that cost 4 times as much, are 8 times as heavy. Ends fires fast as 2 seconds. Fits in palm of hand. Never corrodes. *Guaranteed for 20 years!* Sells for only $3.98!

Show it to owners of homes, cars, boats, farms, etc.—make good income. H. J. Kerr reports $20 a day. C. Kama, $1,000 a month. Write for FREE Sales Kit. No obligation.

MERLITE INDUSTRIES, Inc., Dept. 267, 201 East 16th St., New York 3, N. Y. *(If you want demonstration sample too, send $2.50. Money back if you wish.)*

INVENTORS

Learn how to protect your invention. Secure "Patent Guide" together with "Record of Invention" form—without obligation.

CLARENCE A. O'BRIEN & HARVEY JACOBSON
Registered Patent Attorneys
026-G District National Bldg. Washington 5, D. C.

MONEY FOR YOU—SELL CHRISTMAS CARDS-UP TO 100% PROFIT

FREE SAMPLES 50 FOR $1
NAME PRINTED CARDS, NAPKINS AND STATIONERY

Make Money Easily. $50 profit selling 100 Feature Boxes. Complete line big value, fast selling plastic, metallic Christmas and Everyday cards. Smart gift items. Embossed designed cards, stationery, napkins, coasters with name 50 for $1 up. No money or experience needed to start. Fund raising plan for churches and clubs. Special bargain offers. Cash bonus. Write for samples on approval.

EMPIRE CARD CO., 140 Fox St., Elmira, N. Y.

LEARN UPHOLSTERING

A MONEY-MAKING VOCATION OR A BUSINESS OF YOUR OWN. Practical home training. You get materials to make and upholster a fine Ottoman with your lessons. Professional upholsterer's tools available. Write today for free, illustrated booklet.

WEST COAST UNIVERSITY, Extension Dept. PP-70
1601 S. Western Ave. Los Angeles 6, Calif.

LAW

STUDY AT HOME for Business Success and LARGER PERSONAL EARNINGS. 40 years expert instruction—over 114,000 students enrolled. LL.B. Degree awarded. All text material furnished. Easy payment plan. Send for FREE BOOK—"Law and Executive Guidance"—NOW!

AMERICAN EXTENSION SCHOOL OF LAW
Dept. B-28, 646 N. Michigan Ave., Chicago 11, Illinois

NERVOUS STOMACH

ALLIMIN relieves distressing symptoms of "nervous stomach"—heaviness after meals, belching, bloating and colic due to gas. ALLIMIN has been scientifically tested by doctors and found highly effective. World famous—more than a ¼ billion sold to date. At all good drug stores.

ALLIMIN Garlic Tablets

(Continued from page 91)

but still seemed mine if I would only reach to touch it. This was how it was: it was all contradiction, it was all black and white and near and far and big and small, coexistent. It was circular. It was forever—

Until the blinding flash.

The blinding flash, then nothingness, and the last fading memory of Stephen Luks' cry: *"Henning! You've got it at full speed—don't!"*

Then I am in bed. My own bed—my own modern and ordinary apartment on Walnut Street, and through the half sleep I am looking at the electric alarm clock and I hear the sound of a trolley outside and I know somehow that it is Monday, November 29th, mid-twentieth century, and soon the city will come to life.

Soon I will go to work—I have the day shift this week.

Soon I will walk into the city room and it will seem to me strangely quiet, although the rewrite men are in place and the readers are hunched over the rim, and old Spike Frayne is there in his far corner with his obits. And Grosbeck will come to his office door and beckon to me.

By that time I won't remember what has happened. I had better get this down on paper now, some of it, then hide it so that I'll never find it to be reminded of it. In my half-cycle—in my forward movement in time—I don't want to know that *I* caused the Time Drop by forcing Stephen Luks' machine beyond its limits. I don't even want to know that I have the security I've always wanted: I have more: I am immortal: I will never die but keep going in a circle through the two weeks after the Time Drop, into Stephen Luks' time machine—and back again to the morning of November 29th, 1965.

Now, if you, too, turn back to the beginning, you will see what I mean. The circumstances that led to the whole thing are—

YOU CAN'T LOSE!

NATIONALLY ADVERTISED PRODUCTS

NO EXPERIENCE NECESSARY

NO MONEY TO INVEST

FREE SAMPLE OUTFITS

FULL OR PART TIME

HAVE A PROFIT MAKING BUSINESS OF YOUR OWN

A LIFETIME FUTURE

Man or woman—young or old, YOU can earn a steady income in full or spare time as an independent Kendex dealer. Amazing and almost "impossible" earnings can become a reality for you. Herbert Armstrong of Tenn. earned $202 in 9 days. C. O. Watkins of Oregon sent 92 orders in one day. You have the same opportunity to duplicate these exceptional earnings. Over one million dollars will be earned in 1950 by Kendex dealers—why not let us establish you in your own business and get a share of these wonderful earnings?

KENDEX NYLONS REPLACED FREE . . .

if they run or snag within guarantee period up to three months! Impossible? It's true! No matter what the cause—hard use or deliberate abuse—whether it is fault of the hose or the wearer—Kendex nylons are replaced FREE if they run, snag or become unfit for wear within the guarantee period. How could any woman resist a positive guarantee of satisfaction when she can obtain it without paying any more than other standard advertised brands? Kendex nylons are NOT sold in stores, so you have no competition. Complete line includes everything from heavy 70 denier service weight to gossamer luxurious ultra sheer 15 denier 60 gauge. Proportioned sizes and lengths. Latest colors plus white.

LINGERIE - ROBES - HOUSECOATS - MEN'S HOSE

In addition to the sensational Kendex nylons, you will have a complete line of glamorous lingerie, beautiful robes and housecoats plus a complete line of Kentcraft mens' hosiery guaranteed for one full year. Any pair or pairs of men's hose that does not give satisfactory wear within one year of purchase will be replaced FREE!

NATIONALLY ADVERTISED

Kendex will spend over $350,000.00 in 1950 to tell millions of readers of the advantages in buying from you. Almost every issue of Good Housekeeping, Saturday Evening Post, McCall's, Women's Home Companion and Ladies' Home Journal carry our advertising in addition to many others. Kendex has advertised in Life, Look, Collier's, etc. Awarded Good Housekeeping Seal. Thousands of orders are shipped daily from coast to coast.

FOUR MONEY-MAKING LINES

- WOMEN'S NYLON HOSIERY
- GLAMOROUS LINGERIE
- HOUSECOATS—ROBES
- MEN'S HOSIERY

MAIL TODAY

NOTHING TO PAY

NO OBLIGATION

FREE NYLON STOCKING

EVERYTHING GIVEN FREE

Risk nothing! Mail coupon and we will send you, free and prepaid, complete money-making outfits including sample nylon stocking, samples of lingerie, robes, housecoats and men's hose fabrics and everything you need to immediately start making money. Complete outfits become your property even if you don't send any business. Simply write orders, we deliver and collect. Advance cash plus huge bonus. No money or experience needed. Mailing the coupon is all you need to start on the road to a 52-weeks-of-the-year high paying business of your own. You have everything to gain and nothing to lose.

KENDEX COMPANY, BABYLON 39, N.Y.

KENDEX COMPANY
BABYLON 39, N.Y.

Date _____ 1950

Send me, free and prepaid, everything I need to make money as a Kendex dealer, including sample stocking etc. There is nothing for me to pay now or later and I am under no obligation in accepting your money-making outfits.

Name _____

Address _____

City _____ State _____

Best tire value starts INSIDE . . . with

B.F.Goodrich

"RYTHM RIDE" GIVES YOU MORE SAFETY, COMFORT, MILES

FRED WARING

Musical star of stage, radio and television says:

"LOOK INSIDE FOR INSIDE PROOF"

"Rythm makes the difference in music," says Fred Waring. "But I never knew it made the difference in tires too—until I saw inside proof in a BFG Silvertown."

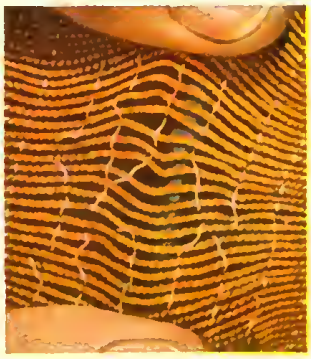
You can see it too—how B. F. Goodrich tire cords are precision spaced in live rubber, with *no cross threads!* Free to work together *in rythm* to give you the best tire value—"Rythm Ride" *—at no extra cost!*

See your BFG dealer. Convenient terms, generous trade-in allowance.

IF YOU CAN TELL WHICH MUSICIANS ARE BEST, YOU CAN TELL WHICH TIRE IS BEST:

1 In every tire thousands of cords flex as you ride. But in most tires, non-working cross-threads hamper the cord action. As a result, the cords are as *out of rythm* as the young musicians shown above.

2 There are *no cross-threads* in a B. F. Goodrich tire. Cords are free to work *in rythm* like the trained violinists above—free to pass impact from one to another, smother road shock, reduce wear, cushion bumps.



3 Most tire cords bunch and gap because of shackling cross-threads. Result: weak spots, "slacker cords", overworked cords. But BFG cords are sealed in rubber with uniform spacing and tension.

4 Only B. F. Goodrich has the equipment and skills to give you "rythmic-flexing cords" in every tire for every purpose. Buy today. See your B. F. Goodrich dealer. The B. F. Goodrich Company, Akron, O.

Another scan
by
cape1736